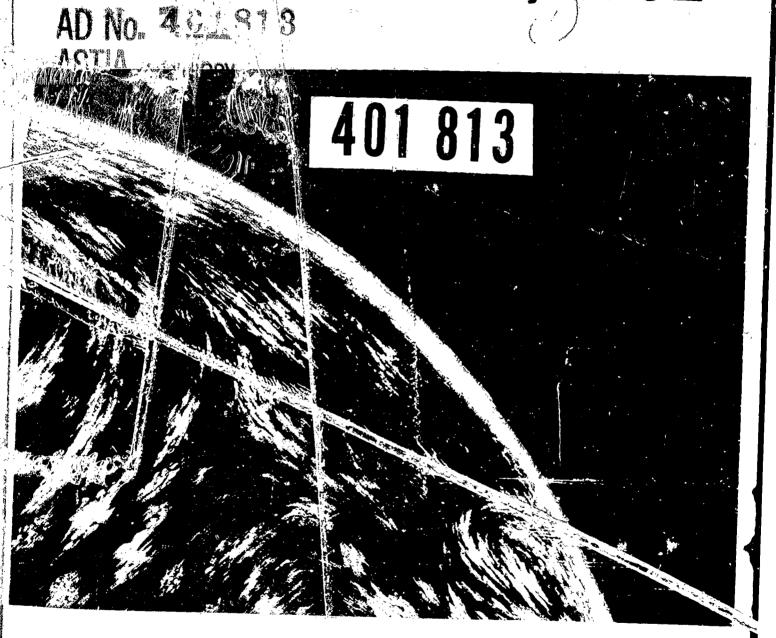
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S. STANDARD AT OSPHERE, 1962





•ICAO STANDARD ATMOSPHERE
TO 20 KM

OPOSED EXTENSION TO 32 KM

*TABLES AND DATA TO 700 KM

Best Available Copy

U.S. STANDARD ATMOSPHERE, 1962

To Harry Wexler

Dr. Harry Wexler, cochairman of the United States Committee on Extension to the Standard Atmosphere and Director of Meteorological Research for the United States Weather Bureau, died on August 11, 1962. Over a period of nearly fifteen years Dr. Wexler led the development and formulation of the United States Standard Atmosphere. This work is respectfully dedicated to him.

COMMITTEE ON EXTENSION TO THE STANDARD ATMOSPHERE (COESA) Air Force Cambridge Research Laboratories (GRD) National Aeronautics and Space Administration and U. S. Weather Bureau

1065 Main Street

Waltham, Massachusetts

TWinbrook 4-9392

SUBJECT: U. S. Standard Atmosphere, 1962

MAR 1 9 1963

TO: ASTIA

Parish Services of March 19 Arlington Hall Station

Arlington 12, Virginia

Because of your great interest in the properties of the upper atmosphere, we are furnishing herewith a courtesy copy of the "U. S. Standard Atmosphere, 1962". We know you will be pleased to learn that in addition to indicating some of the variability of the atmosphere, Part II of this report, COESA is currently planning an effort which should lead to a follow-on publication on composition and systematic variability, early in 1964.

Sincercly

MAURICE DUBIN

NORMAN SISSENWINE

Cochairmen

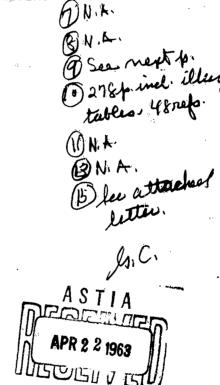
Committee on Extension to the Standard Atmosphere

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B U. S. Standard Atmosphere, 1962

U.S. STANDARD ATMOSPHERE, 1962

ICAO STANDARD ATMOSPHERE TO 20 KILOMETERS PROPOSED ICAO EXTENSION TO 32 KILOMETERS TABLES AND DATA TO 700 KILOMETERS



(2) Junished by NATIONAL AERONAUTICS AND SPACE ADMINISTRATION UNITED STATES WEATHER BUREAU

Abstract

The U.S. Standard Atmosphere, 1962 is a product of COESA generated under the impetus of increased knowledge of the higher atmosphere and more accurate determinations of basic quantities, such as redefinition of the absolute thermodynamic temperature scale. For all practical purposes the U.S. Standard Atmosphere, 1962 is in agreement with the ICAO Standard over their common altitude range. Background information, including a brief historical statement, is given in the Foreword. The document is arranged in three parts. Part I gives the basis for the main tables of atmospheric properties and contains a full development of gravity and geopotential as well as the basic assumptions, formulas, and derived quantities. In Part II additional information relating to the atmosphere is given, including discussion of systematic variations, observed and inferred extremes, and representations of atmospheric variables as approximate analytic functions of altitude. Part III contains the main tables of atmospheric properties to 700 kilometers calculated in both metric and English units. Throughout the document figures and short tables are introduced to aid in visualizing the variation with altitude of atmospheric parameters and to provide conversions between various units.

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radius of the earth at the equator
             geomagnetic index
BTU
             British thermal unit
             subscript indicating base or reference level; also semiminor axis, or polar radius
^{\circ}C
             degrees, in thermodynamic Celsius scale
C_{\mathfrak{t}}
             international magnetic character figure
C_{\bullet}
             speed of sound
             calorië
cal
cm
             centimeter
٠F
             degrees, in thermodynamic Fahrenheit scale
F_{10}
             decimetric solar flux
             ellipsoid flattening
ft
             foot
G
             Newton's universal gravitational constant
             acceleration due to gravity
             gravity force, per unit mass
gm
             gram
H
             geopotential altitude
H_{P}
             pressure scale height
H,
             density scale height
             H-H_{\bullet}
             subscript indicating ice-point value
             inch
in،
             international nautical mile
i.n. mi
Ĵ
             second zonal harmonic coefficient
òΚ
             degrees, in thermodynamic Kelvin scale
K,
             3-hour range index
k
             thermal conductivity
kg
             kilogram (mass)
             kilogram-calorie
kg-cal
             kilogram (force)
kgf
kg-mol
             kilogram-mole
km
             kilometer
kw-hr
             kilowatt hour
\dot{m{L}}
             mean free path
             molecular-scale temperature geometric gradient, \frac{dT_M}{dZ}
L_{M}
             molecular-scale temperature geopotential gradient, \frac{dT_{k}}{dH}
L'_{M} :
lb
             pound (mass)
lb-mol
             pound-mole (mass)
lbf
             pound (force)
M
             mean molecular weight of air
M
             mass of the earth
m
             meter
mb
             millibar
mks
             meter-kilogram-second system of units
             millimeter
mm
N
             Avogadro's number
```

number density; also exponent subscript indicating sea-level value pressure poundal Ŕ degrees, in thermodynamic Rankine scale position vector universal gas constant radial distance Sutherland's constant second . temperature in absolute thermodynamic scales maximum daytime temperature ice-point temperature in absolute thermodynamic scales molecular-scale temperature in absolute thermodynamic scales minimum nighttime temperature temperature in nonabsolute thermodynamic scales; also, day of year ice-point temperature in nonabsolute thermodynamic scales universal measure of magnetic activity particle speed (arithmetic average) mole volume of air under existing conditions of T and \hat{C} altitude in geometric measure constant used in Sutherland's viscosity equation ratio of specific heats kinematic viscosity longitude coefficient of viscosity collision frequency mass density effective collision diameter of a mean air molecule geopotential centrifugal potential potential energy of the gravitational attraction geographic latitude geocentric latitude angular distance from center of diurnal bulge angular velocity of the earth specific weight

Foreword

On March 15, 1962, a revised U.S. Standard Atmosphere to 700 km was adopted by the United States Committee on Extension to the Standard Atmosphere (COESA), representing 29 U.S. scientific and engineering organizations. This committee has also recommended the lower 32 km of this representation of the atmosphere to the International Civil Aviation Organization (ICAO) for international standardization. The lowest 20 km of this new COESA atmosphere coincides with the 20 km Manual of the ICAO Standard Atmosphere, 1954, except for minor differences due to revised standardization of some physical constants.

This report revises and replaces COESA's first report, U.S. Extension to the ICAO Standard Atmosphere—Tables and Data to 300 Standard Geopotential Kilometers, 1958 (ref. 1).

The U.S. Air Force, the National Aeronautics and Space Administration, and the U.S. Weather Bureau cosponsored the movement which led to this new representation of the atmosphere. Participating organizations included:

Aeronautical Systems Division, AFSC

Air Force Deputy Commander Aerospace Systems, AFSC

Air Weather Service, USAF

Applied Physics Laboratory, The Johns Hopkins University

Army Ballistic Missile Agency

Army Signal Research and Development Laboratory

Ballistic Research Laboratories (Aberdeen Proving Ground)

Battelle Memorial Institute

The Boeing Company

Federal Aviation Agency

General Dynamics/Astronautics

Geophysics Corporation of America

Geophysics Research Directorate, AFCRL

Goddard Space Flight Center, NASA

Harvard College and Smithsonian Institution Astrophysical Observatories

High Altitude Engineering Laboratory, University of Michigan

Jet Propulsion Laboratory, California Institute of Technology

Langley Research Center, NASA

Lockheed Missiles and Space Company

George C. Marshall Space Flight Center, NASA

NASA Headquarters

National Bureau of Standards, Department of Commerce

Naval Proving Grounds

Naval Research Laboratory

Navy Weather Research Facility

The Rand Corporation

Space Technology Laboratories, Inc.

United States Weather Bureau, Department of Commerce

White Sands Missile Range

COESA is a group of scientific and engineering organizations, each holding national responsibilities related to the requirement for accurate tables of the atmosphere to high altitudes. After they joined forces to develop such an atmosphere in November 1953, several new organizations were added to the ranks. A working group, appointed at the first meeting, met frequently between 1953 and the end of 1956. Their recommendations, which were accepted by the entire committee, were published in 1958 (ref. 1).

Scientific progress quickly rendered this 1958 document obsolete, since orbital periods of the first Sputnik indicated that densities at the upper altitudes were in error by more than an order

of magnitude. The Working Group was reestablished in January 1960 to review all available satellite and rocket data as related to the COESA tables and to consider the need for revision. For the next year, the Working Group studied new data and theories from more refined satellite flights. The information obtained from the early USSR satellites was insufficient for the purpose because the USSR aerodynamic configurations were not made known and the data covered only the lower altitude range of satellite orbits. A few years of observations at satellite altitudes were also required to understand the effects of solar activity and position. The United States satellites provided the necessary extreme-altitude data. Additional rocket flights provided needed detail for levels above those of balloon flights. The COESA Working Group prepared a recommendation from this new scientific inventory which was accepted by the entire committee. Active Working Group participants included:

*Dr. Luigi Jacchia, Smithsonian Institution Astrophysical Observatory, Chairman

Mr. Norman Sissenwine, AFCRL, Executive Secretary

Mr. Herbert Appleman, Air Weather Service

Dr. H. J. aufm Kampe, USA Signal Corps, R & D Laboratory

*†Dr. K. S. W. Champion, AFCRL

*Mr. Allen E. Cole, AFCRL

Mr. Walter C. Conover, USA Signal Corps, R & D Laboratory

Dr. Arnold Court, AFCRL

Mr. Maurice Dubin, NASA

Lt. Col. J. C. Glover, Air Weather Service

Mr. R. K. Hankey, ASD, Wright-Patterson AFB

*Mr. Richard A. Hord, Langley Research Center, NASA

Dr. D. P. Johnson, National Bureau of Standards

Dr. F. S. Johnson, Lockheed Missile Systems Division

Mr. Leslie M. Jones, University of Michigan

Dr. H. K. Kallmann-Bijl, The Rand Corporation

Dr. W. W. Kellogg, The Rand Corporation

Mr. Herman LaGow, Goddard Space Flight Center, NASA

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Dr. Hartley L. Pond, AFCRL

Mr. Roderick S. Quiroz, Air Weather Service, USAF

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Mr. Nelson W. Spencer, Goddard Space Flight Center, NASA

†Mr. Sidney Teweles, U.S. Weather Bureau

Dr. Harry Wexler, U.S. Weather Bureau

This revised U.S. Standard Atmosphere, 1962 depicts idealized middle-latitude year-round mean conditions for the range of solar activity that occurs between sunspot minimum and sunspot maximum. Part I gives the basis for the tables appearing in Part III. Supplemental presentations provided in Part II indicate the variability of density above 200 km with solar position and activity. For lower altitudes they indicate the range of seasonal and day-to-day variability that can be deduced from the available data.

Although density is the primary atmospheric property measured at or deduced for very high altitudes, it is necessary to define the atmosphere in terms of temperature, in order to achieve continuity between the ICAO atmosphere and its extension. The application of molecular-scale temperature segments at higher altitudes yields densities which are consistent with observed densities. Table I.4(a) is the basic framework for the tables of the U.S. Standard Atmosphere, 1962.

The new U.S. Standard Atmosphere, 1962 agrees in general with but differs in detail from the Committee on Space Research (COSPAR) International Reference Atmosphere, CIRA 1961. CIRA 1961 is not in agreement with the ICAO Standard Atmosphere. The U.S. Standard Atmosphere, 1962 provides detail and more parameters than CIRA 1961, and includes refinements in matching the data that were not possible in the earlier COSPAR atmosphere.

†Editor

^{*}Contributor to Part II.

Close contact between COSPAR and COESA has reduced discrepancies between the two atmospheres to a minimum.

On the basis of information provided by the COESA Working Group, this document was prepared by personnel of the NASA Langley Research Center, notably: Dr. John E. Duberg, Mr. William J. O'Sullivan, Jr., Mr. Richard A. Hord, Dr. S. L. Seaton, and Mr. James A. Mullins, who wrote and revised the manuscript; Miss Vera Huckel and Miss Jean Mason, who did the checking and curve-fitting; and Mr. Roger Butler and Miss Lillian Boney, who wrote the machine programs for computation of the tables.

The cochairmen would like to take this opportunity to thank the many Working Group scientists and engineers who contributed unselfishly of their time and energies to bring this new representation of the atmosphere into being. Our special thanks and that of all organizations of the committee go to the individuals who prepared and edited this report.

MAURICE DUBIN, NASA NORMAN SISSENWINE, USAF HARRY WEXLER, USWB

Cochairmen, U.S. Committee on Extension to the Standard Atmosphere

PART I

Basis of the Tables

PART I

Basis of the Tables

I.O INTRODUCTION

Part I gives the basis for computation of the main tables of atmospheric properties that appear in Part III. Also included in Part I are short tables of physical constants, conversion factors, and defining properties used in the computations.

I.1 BACKGROUND

The modern standard atmosphere was first developed in the 1920's in the United States and in Europe to satisfy a need for standardization of aircraft instruments and aircraft performance. The United States standard atmosphere was generated by the National Advisory Committee for Aeronautics (NACA) while the European standard atmosphere was produced by the International Commission for Aerial Navigation (ICAN). There were slight differences between the independently developed ICAN and NACA atmospheres. These differences were reconciled and international uniformity was achieved through adoption by the International Civil Aviation Organization (ICAO). on November 7, 1952, of a new standard atmosphere. This new standard was officially accepted by NACA on November 20, 1952, and forms the basis for tables published in NACA Report 1235 (ref. 2). The computations for these tables were carried out by the United States. Parts of the tables were independently computed by the Italian government. Conversions from metric to English units were made in accordance with internationally adopted conversion factors. The tables extended over an altitude range from 5 km below to 20 km above mean sea level.

Shortly after this first international standard atmosphere was published, a need began to be apparent for extension of the tables to greater altitudes. The U.S. Committee on Extension to the Standard Atmosphere (COESA) was organized in 1953, and adopted in 1956 the U.S. Extension to the ICAO Standard Atmosphere (ref. 1) including tables, developed from theory, extending to an altitude of 300 geopotential kilometers.

At about this same time, reliable instrumentation of rockets and satellites made possible experimental determinations of important atmospheric properties to altitudes of the order of 1,000 kilometers. This

new information so added to the fund of knowledge that in January 1961 a new Working Group of COESA was convened for the purpose of developing a new standard atmosphere.

In order to obtain the best scope and in order to achieve the purpose in minimum time, task groups were formed to lay the foundation for this standard atmosphere. Membership of these task groups was as follows:

Task Group I—Surface to 90 km
Arnold Court (Convener)
K. S. W. Champion
Luigi Jacchia
Raymond A. Minzner
Harold B. Tolefson (Liaison)
Lester M. Jones (Adviser)
William Nordberg (Adviser)

Task Group II--90 km to 200 km
Herman E. LaGow (Convener)
Nelson W. Spencer
Raymond A. Minzner
K. S. W. Champion
Philip W. Mange
Richard A. Hord (Liaison)

Task Group III—200 km to 700 km
H. K. Kallmann-Bijl (Convener)
Luigi Jacchia
F. S. Johnson
K. S. W. Champion
John E. Duberg (Liaison)

Task Group IV—90 km to 700 km
Herman E. LaGow (Convener)
K. S. W. Champion
F. S. Johnson
H. K. Kallmann-Bijl
Philip W. Mange
Raymond A. Minzner

The purpose, then, of this U.S. Standard Atmosphere, 1962 is to take account of increased knowledge and more accurate determinations of basic quantities, including the redefinition of the absolute thermodynamic temperature scale by the Tenth General Conference on Weights and Measures in 1954. For all practical purposes, the U.S. Standard Atmosphere, 1962 is in agreement with the ICAO Standard Atmosphere over their common altitude range.

The U.S. Standard Atmosphere, 1962 is divided into four altitude regions. The first, from -5 to +20 km (geopotential altitude), is designated standard. A second region, from 20 to 32 km (geopotential altitude), is designated proposed standard. Next, the region from 32 km (geopotential altitude) to 90 km (geometric altitude) is called tentative, and last, that portion from 90 to 700 km (geometric altitude) is termed execulative.

Expressions for the variation with altitude of the acceleration due to gravity have been reexamined by COESA and are discussed in section I.2.4.

In extending the U.S. Standard Atmosphere to 700 km, and in light of the designations attached to various height intervals (implying increasing uncertainty with increasing height), there is included a discussion of variability and extremes of data in order to give those using this standard an appreciation of such excursions from the standard as may be met in practice. Fundamentally, the U.S. Standard Atmosphere, 1962 is defined in terms of an ideal air assumed to be devoid of moisture, water vapor, and dust, and obeying the perfect gas law. It is based upon accepted standard values of the sea-level air density, temperature, and pressure.

For most purposes, the adoption of a sequence of connected linear segments involving variations of molecular-scale temperature with altitude to represent standard conditions is satisfactory and is retained here. However, there is added, for those needing a smoothed change of molecular-scale temperature with altitude, a section dealing with approximate analytic expressions for the molecular-scale temperature and other variables.

The bulk of this volume is devoted to tabulated values of atmospheric properties. It is especially to be noted that up to 90 km entry is made to the tables in terms of geopotential altitude on the left-hand pages, while on right-hand pages entry is made in terms of geometric altitude. Above 90 km entry is made in geometric altitude only.

Metric tables appear first, followed by similar tables in English units. It is also to be noted that at the 90-km level, tabular entry of certain quantities is terminated for technical reasons discussed in the text. In the following paragraphs basic concepts and formulas are developed first, followed by relationships between variables and then by derived quantities. Graphs illustrative of the functions appear in the body of the text near the equations in order to facilitate visualization of the behavior of the quantities. Units and conversion factors are arranged in convenient tables.

1.2 BASIC ASSUMPTIONS AND FORMULAS

I.2.1 PRIMARY CONSTANTS.—If or purposes of computation it is necessary to establish numerical values for various constants appropriate to the

earth's atmosphere. In some instances the best value of the constant is known to greater accuracy than needed in atmospheric tables, and thus, rounding to a suitable value is appropriate. Table I.2.1 gives numerical values adopted as exact for the computations contained herein.

Discussion of these tabular values is as follows:

- P₀ Sea-level pressure is, by definition, 1.013250 ×10⁵ newtons m⁻². This corresponds to the pressure exerted by a column of mercury 0.760 m high, having a density of 1.35951×10⁴ kg m⁻³ and subject to an acceleration due to gravity of 9.80665 m sec⁻².
- ho_0, t_0 Sea-level density and *emperature, respectively, are those values published in the ICAO Standard Atmosphere.
- g₀. The value for g₀, sea-level acceleration due to gravity, was adopted by the ICAO for the ICAO Standard Atmosphere and is adopted here as the value at exactly 45° geographic latitude.
- S, \(\beta \)

 Sutherland's constant S and \(\beta \), also a constant, are used in Sutherland's viscosity equation. These constants are determined from empirical data on the viscosity of air (ref. 3) in accordance with Sutherland's equation, and in general engineering practice the values shown in table I.2.1 are used.
- Temperature of the ice point is 273.15° K.

 This value results from the decision in October 1954 by the Tenth General Conference on Weights and Measures, meeting in Paris, France, to redefine the temperature scale by selecting the triple point of water as the fundamental, fixed point and assigning it the temperature 273.16° K (0.01° C).
- γ The ratio of the specific heat of air at constant pressure to the specific heat of air at constant volume is adopted as 1.40 (dimensionless).
- σ The mean collision diameter for air is assumed to be a constant for all altitudes (ref. 4).
- N Avogadro's number based on the scale C¹²=12.0000. (The International Union of Pure and Applied Chemistry, meeting in Montreal in 1961, adopted a new table of atomic weights based on the assignment of atomic weight 12.0000 to the C¹² isotope.)
- R* The value of R* adopted here is that given in reference 5 when the latter is corrected for the aforementioned change in the atomic-weight scale.

TABLE I.2.1.—ADOPTED PRIMARY CONSTANTS

Symbol	Metric units (mks)	English units (ft-lb-sec)		
P_{3}	1.013250×10 ⁵ newtons m ⁻²	2116,22 lbf ft-2		
ρ_0	1.2250 kg m ⁻⁸	0.076474 lb ft-3		
t ₀	15° C	59.0° F		
g_0	9.80665 m sec ⁻²	32.1741 ft sec-2		
S	110.4° K	198.72° R		
g0 S T:	273.15° K	491.67° R		
β	$1.458 \times 10^{-6} \text{ kg sec}^{-1}\text{m}^{-1}(^{\circ}\text{K})^{-1/2}$	7.3025×10^{-7} lb ft ⁻¹ sec ⁻¹ (°R) ^{-1/2}		
γ	1.40 (dimensionless)	1.40 (dimensionless)		
σ	3.65×10 ⁻¹⁰ m	1.1975×10 ⁻⁹ ft		
N	6.02257×10 ²⁶ (kg-mol) ⁻¹	2.73179×1026 (lb-mol)~1		
R*	8.31432 joules (°K)-1 mol-1	1545.31 ft lb (lb-mol)-1 (°R)-1		

Conversion factors between the English and mks systems, in accordance with an agreement reached by the directors of the standards laboratories of six English-speaking nations, effective July 1, 1959, are (from ref. 6):

I.2.2 THE PERFECT GAS LAW.—The equation of state of a perfect gas (the perfect gas law) and the hydrostatic equation (see section I.2.3) are convenient starting points in the development of the expressions and relationships necessary to realization of tables of values descriptive of the earth's atmosphere.

The equation of state of a perfect gas is (from ref. 7):

$$\rho = \frac{\underline{M}P}{R^*T} \qquad \qquad \text{I.2.2-(1)}$$

wherein P is the atmospheric pressure, ρ is the air density, R^* is the universal gas constant, and T is the absolute temperature. It is to be noted that M, the mean molecular weight of air, is assumed to be constant up to an altitude of 90 km, while above this altitude M varies because of increasing dissociation and diffusive separation.

I.2.3 THE HYDROSTATIC EQUATION.—In adopting the hydrostatic equation it is assumed that the atmosphere is static with respect to the earth. The equation in appropriate form is:

$$dP = -\rho g \ dZ \qquad \qquad I.2.3-(1)$$

The acceleration due to gravity g and the geometric altitude Z are discussed in detail in later sections of the document.

I.2.4 Gravity.—Viewed in the ordinary manner, from a frame of reference fixed in the earth, the atmosphere is subject to the force of gravity. The force of gravity is the resultant (vector sum) of two forces: (a) the gravitational attraction, in accordance with Newton's universal law of gravitation, and (b)

the centrifugal force, which results from the choice of an earthbound, rotating frame of reference.

The gravity field, being a conservative force field, can conveniently be derived from the gravity potential energy, per unit mass—that is, from the geopotential Φ . This is given by

$$\Phi = \Phi_G + \Phi_C \qquad \qquad \text{I.2.4-(1)}$$

where Φ_{σ} is the potential energy, per unit mass, of the gravitational attraction, and Φ_{σ} is the potential energy, per unit mass, associated with the centrifugal force. The gravity force, per unit mass, is

$$\mathbf{g} = -\nabla \Phi \qquad \qquad \mathbf{I}.2.4 - (2)$$

where $\nabla \Phi$ is the gradient (ascendant) of the geopotential. The acceleration due to gravity is denoted by g and is defined as the magnitude of g; that is,

$$g = |\mathbf{g}| = |\nabla \Phi|$$
 I.2.4-(3)

The gravity field is conveniently represented by its equipotential (level) surfaces, on each of which the geopotential Φ is constant, the surfaces being pierced orthogonally by curves called the lines of gravity force. At each point on a line of force, the tangent has the direction of the corresponding gravity force vector \mathbf{g} .

In this document the geometric altitude Z of a point is defined as the distance, measured along the line of force through the point, from the equipotential surface for which $\Phi=0$ to the point in question, the surface for which $\Phi=0$ corresponding closely to mean sea level. (The slight differences between geometric altitude as defined here and several straight-line distances, shown schematically in fig. I.2.4(a), are negligible, for most practical purposes, in the altitude range considered herein.) With this definition, the differential relation of the geometric altitude Z and the geopotential Φ is

$$d\Phi = g \ dZ \qquad \qquad \text{I.2.4-(4)}$$



FIGURE I.2.4(a).—Relationships between various heights.

which is the incremental work done in lifting a unit mass a distance dZ against the gravity force. Therefore, the geopotential at a point whose altitude is Z is given by

$$\Phi = \int_0^z g \ dZ \qquad \qquad \text{I.2.4-(5)}$$

where the integration is performed along the line of force which passes through the point. (The general equation for the difference between the geopotential at points A and B is:

$$\Phi_B - \Phi_A = \int_A^B \mathbf{g} \cdot d\mathbf{R} \qquad \qquad \text{I.2.4-(6)}$$

where the line integral on the right-hand side is independent of the path and R is the position vector of a point on the path.)

The centrifugal potential Φ_{σ} can be expressed as

$$\Phi_C = \frac{1}{2}\Omega^2[a^2 - (r\cos\psi)^2]$$
 I.2.4-(7)

where Ω is the angular velocity of the earth and $r\cos\psi$ is the distance, measured perpendicularly to the earth's axis, from this axis to the point (r, θ, ψ) . The spherical coordinates r, θ , and ψ are, respectively, the radial distance from the earth's center, the longitude, and the geocentric latitude (the angle that the radius vector makes with the equatorial plane of the earth). In equation 1.2.4-(7), the constant α denotes the equatorial radius of the earth.

The gravitational potential Φ_G can be expanded in an infinite series of spherical harmonics. When the less important terms in this series are discarded, the expression for Φ_G becomes

$$\Phi_{\sigma} = -\frac{G\underline{M}}{r} \left[1 - \frac{J}{3} \left(\frac{a}{r} \right)^2 (3 \sin^2 \psi - 1) \right] + \frac{G\underline{M}}{a} \left(1 + \frac{J}{3} \right)$$
I.2.4-(8)

where G is Newton's universal gravitational constant, \underline{M} is the mass of the earth, and J is the second harmonic coefficient.

Equations I.2.4-(1), -(2), -(3), -(7), and -(8) define the gravity field of the earth for the purposes of this document. The adopted geopotential Φ is independent of the longitude θ . Therefore, the defined gravity field is axially symmetric. Moreover, each line of force lies entirely in a meridian half-plane, θ =Constant, and has the differential equation

$$r\frac{d\psi}{dr} = \frac{\frac{1}{r}\frac{\partial\Phi}{\partial\psi}}{\frac{\partial\Phi}{\partial r}}$$
 I.2.4-(9)

The gravity line of force passing through the point for which $\Phi=0$ and $g=g_0$ is the curve along which the present standard atmosphere is postulated. It is possible to select the value of the constant GM (see eq. I.2.4–(8)) well within the present limits of measurement and in such a way that the point for which $\Phi=0$ and $g=g_0$ corresponds precisely to the geographic latitude $\phi=45^\circ$ (geocentric latitude $\psi=44.808^\circ$); this has been done with the use of selected average values for J and a (see ref. 8):

$$J=1.623495\times10^{-3}$$
 (dimensionless) I.2.4-(10)

$$a = 6,378,178 \text{ meters}$$
 I.2.4-(11)

The corresponding value of GM is

$$GM = 3.9862216 \times 10^{14} \text{ meters}^3 \text{ sec}^{-2}$$
 I.2.4-(12)

For the accuracy required in this document, it suffices to treat the surface $\Phi=0$ as an ellipsoid whose flattening (ellipticity) is

$$f=1-\frac{b}{a}=\frac{1}{298.32}$$
 I.2.4-(13)

where b is the semiminor axis, or polar radius. It should be noted that this value of the flattening is the average value given in reference 8. In terms of a and b, the values r_0 and ψ_0 which correspond to sea level and $\phi=45^\circ$ are found from the analytic geometry of the ellipse to be:

$$r_0^2 = \frac{a^4 + b^4}{a^2 + b^2} \qquad \qquad \text{I.2.4-(14)}$$

$$\tan \psi_0 = \frac{b^2}{a^2}$$
 1.2.4-(15)

Approximations, sufficiently accurate for the computations required herein, are developed in the following paragraphs for the equations of the line of gravity force and the acceleration due to gravity (see ref. 9).

Since the geopotential as approximated here is independent of the longitude angle θ , the binomial series can be used to write the following expanded form of equation 1.2.4–(3):

$$g = |\nabla \Phi| = \sqrt{\left(\frac{\partial \Phi}{\partial r}\right)^{2} + \left(\frac{1}{r} \frac{\partial \Phi}{\partial \psi}\right)^{2}}$$

$$= \frac{\partial \Phi}{\partial r} \left[1 + \frac{1}{2} \left(\frac{1}{r} \frac{\partial \Phi/\partial \psi}{\partial \Phi/\partial r}\right)^{2} + \dots \right] \quad \text{I.2.4-(16)}$$

It is sufficiently accurate to retain only the first two terms in the series in brackets and replace $(\partial \Phi/\partial r)^2$ in the denominator of the second term by $(GM/a^2)^2$. The resulting approximate form for equation I.2.4–(16) is

$$\begin{split} g &= \left\{ \frac{GM}{r^3} \left[1 - J \left(\frac{a}{r} \right)^2 \left(3 \sin^2 \psi - 1 \right) \right] \right. \\ &\left. - r \Omega^2 \cos^2 \psi \right\} \left[1 + \frac{1}{2} \frac{1}{r^3} \left(\frac{a^2}{GM} \right)^2 \left(\frac{2GMJa^2}{r^3} + \Omega^2 r^2 \right)^2 \right. \\ &\left. \left. \left(\sin \psi \cos \psi \right)^2 \right] \right. \left. \left[1.2.4 - (17) \right] \right] \end{split}$$

Simultaneous numerical integrations of equation I.2.4-(9) and the equation

$$dZ = \sqrt{(dr)^2 + (r d\psi)^2}$$
 I.2.4-(18)

have revealed that the following linear approximations are adequate for present purposes:

$$\psi = \psi_0 + \left(\frac{d\psi}{dr}\right)_0 (r - r_0)$$
 I.2.4-(19)

$$r = r_0 + \frac{Z}{\left(\frac{dZ}{dr}\right)_0} = r_0 + \frac{Z}{\sqrt{1 + r_0^2 (d\psi/dr)_0^2}}$$
 I.2.4-(20)

With the use of equations I.2.4-(19) and I.2.4-(20) to replace r and ψ by linear functions of Z, equation I.2.4-(17) yields an approximate equation for the acceleration due to gravity as a function of the geometric altitude (shown graphically in fig. I.2.4(b)).

I.2.5 GEOPOTENTIAL.—In accordance with the equation I.2.4-(5) relating the geometric altitude Z to the geopotential Φ , the following equation is used to define the geopotential altitude H:

$$H = \frac{1}{a_0} \Phi = \int_0^z \frac{g}{a_0} dZ$$
 1.2.5-(1)

Here, g_0 denotes the standard sea-level value of the acceleration due to gravity. As in the case of equa-

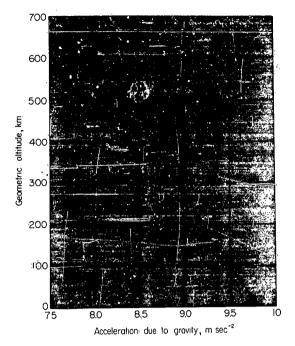


FIGURE I.2.4(b).—Acceleration due to gravity g as a function of geometric altitude Z.

tion 1.2.4-(5), the integration in equation 1.2.5-(1) is performed along the line of force which passes through the point in question. (The geopotential altitude as defined in eq. 1.2.5-(1) has the dimensions of length and is numerically equal to the corresponding geopotential altitude measured in "geopotential length" units (for example, "standard geopotential meter," symbol m', where 1 m'=9.80665 m² sec⁻²). The quantity H is physically equivalent to Φ , which is the work done in elevating unit mass from sea level to (geometric) altitude Z. The definition of H given above is not the conventional meteorological one in which g_0 in eq. I.2.5-(1) would be taken as dimensionless and H would have the dimensions of (Length)² (Time)-2, that is, "geopotential length." The definition adopted here avoids the confusing feature of dividing the geopotential Φ by a dimensionless number whose value changes when the system of units is changed. For meteorological usage, the column labels H, m and H, ft in the tables of Part III can be read H', m' and H', ft', respectively, where the primed units refer to standard geopotential meters and feet, respectively, and H' is the geopotential altitude in the meteorological sense. For further discussion of geopotential altitude, see ref. 10.)

It is important to realize that the distance measured in physical length (as with a meter bar) between successive geopotential surfaces 1 geopotential unit apart is not constant, but increases in physical distance with increasing elevation.

$$dH = \frac{g}{g_0} dZ \qquad \qquad 1.2.5 - (2)$$

then, clearly, the geopotential altitude is measured also along the line OP but differs in numerical value because of the variation of the acceleration due to gravity.

It is to be noted that the scale in figure I.2.4(a) is exaggerated in order to show the nature of the curvature of the middle-latitude plumb line (line of force) and to show clearly the relationship between tangent line, radius line, and projections.

I.2.6 MOLECULAR-SCALE TEMPERATURE.—The molecular-scale temperature \hat{T}_M is defined by

$$T_{\mathbf{M}} = \frac{M_0}{M} T \qquad \qquad \text{I.2.6-(1)}$$

Molecular-scale temperature is the defining property in this atmosphere and, up to geometric altitude Z=90 km, the molecular-weight ratio $M/M_0=1$ and hence $T_M=T$. Above 90 km, M/M_0 is less than unity and hence T_M is greater than T. (See figs. I.2.6(a) and I.2.6(b) for variation of T_M with altitude.)

The molecular-scale temperature variation is defined as a series of connected segments linear in geopotential altitude to $Z=90\,$ km, and linear in geometric altitude above 90 km. The general form of each linear segment is:

$$T_{M} = T_{M,b} + L'_{M}(H - H_{b})$$
 I.2.6-(2)

to 90 km, and

$$T_{M} = T_{M,b} + L_{M}(Z - Z_{b})$$
 1.2.6-(3)

above 90 km.

It is to be noted that L'_{M} is the gradient of molecular-scale temperature with geopotential altitude $\frac{dT_{M}}{dH}$, and L_{M} is the gradient of molecular-scale

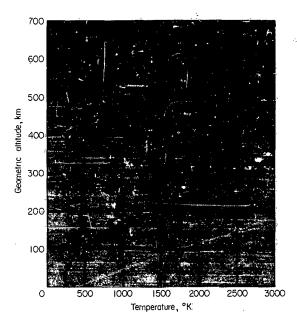


FIGURE I.2.6(a).—Molecular-scale temperature T_M and kinetic temperature T as functions of geometric altitude Z.

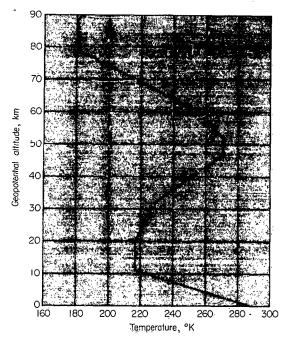


FIGURE I.2.6(b).—Temperature T as a function of geopotential altitude H. $(T_M = T \text{ below } Z = 90 \text{ km or } H = 88.743 \text{ km.})$

temperature with geometric altitude $\frac{dT_M}{dZ}$. The quantity H_b is the geopotential altitude at the base of a particular layer characterized by a specific

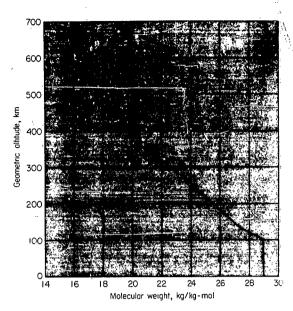


FIGURE I.2.7.—Molecular weight M as a function of geometric altitude Z.

value of L'_M , while $T_{M,b}$ is the value of T_M at altitude H_b or Z_b , as appropriate. At and above 90 km, Z_b , the geometric altitude at the base of a particular layer characterized by a specific value of L_M , is used in place of H_b . The defining base values and gradients are given in table I.4(e).

It is again emphasized that for altitudes up to 90 km the tables are arranged for entry in terms of

geopotential altitude H on left-hand pages, while on right-hand pages entry is made in terms of geometric altitude Z. Above 90 km the tables are arranged for entry in geometric altitude only.

I.2.7 Molecular weight:—Up to Z=90 km the molecular weight M is taken as constant at 28.9644 (scale: C12=12.0000; see section I.2.1 for further discussion of this atomic-weight scale). This value of M is, to six significant figures, the sea-level value M_0 found from the perfect-gas law (eq. I.2.2-(1)) and the adopted values of P_0 , ρ_0 , t_0 , and R^* (see table I.2.1). The value 28.9644 is equivalent to the value 28.966 (scale: oxygen=16) adopted in resolution 164 of the International Meteorological Organization Twelfth Conference of Directors, 1948, and is equal, to six significant figures, to the mean molecular weight of air calculated from the composition of dry air as given in table I.2.7. Table I.2.7 is taken from reference 11 except for minor modifications based upon recent CO₂ measurements. (See, for example, ref. 12.)

Above 90 km, mainly because of molecular dissociation and diffusive separation, the molecular weight changes as depicted in figure I.2.7. A very limited amount of experimental data about molecular weight is presently available above an altitude of 90 km. The tabulated molecular weights have been calculated from polynomials fitted to the values given in reference 13.

I.2.8 SEA-LEVEL PROPERTIES.—Since mean sea level is the zero-altitude reference point in the computations, it is convenient to present numerical values for this reference point. These values are given in table I.2.8.

TABLE I.2.7.—NORMAL COMPOSITION OF CLEAN, DRY ATMOSPHERIC AIR NEAR SEA LEVEL

Constituent gas and formula	Content, percent by volume	Content variable relative to its normal	Molecular weight*
Nitrogen (N ₂)	78. 084		28. 0134
Oxygen (O2)	20. 9476	_	31. 9988
Argon (Ar)	0. 934	<u> </u>	39. 948
Carbon dioxide (CO2)	0. 0314	l t l	44. 00995
Neon (Ne)	0. 001818	-	20. 183
Helium (He)	0. 000524		4.0026
Krypton (Kr)	0. 000114	_	83. 80
Xeron (Xe)	0. 0000087	<u> </u>	131, 30
Hydrogen (H ₂)	0. 00005	?	2. 01594
Methane (CH ₄)	0. 0002	†	16. 04303
Nitrous oxide (N ₂ O)	0. 00005	_	44.0128
Ozone (Os)	Summer: 0 to 0. 000007	}	47. 9982
	Winter: 0 to 0. 000002	† 1	47.9982
Sulfur dioxide (SO ₂)	0-to 0.0001	t i	64.0628
Nitrogen dioxide (NO2)	0 to 0.000002	· † [46. 0055
Ammonia (NH ₃)	0 to trace	†	17. 03061
Carbon monoxide (CO)	0 to trace	t	28. 01055
Iodine (I2)	0 to 0.000001	l t .	253, 8088

^{*}On basis of carbon-12 isotope scale for which C*1:=12.

†The content of the gases marked with a dagger may undergo significant variations from time to time or from place to place relative to the

TABLE I.2.8.—SEA-LEVEL VALUES OF ATMOSPHERIC PROPERTIES

Symbol	Metric	English	
C . 0	340.294 m sec ⁻¹	1116.45 ft sec-1	
*g0	9.80665 m sec-2	32.1741 ft sec-2	
$H_{P,0}$	8434.5 m	27,672 ft	
k_0	$6.0530 \times 10^{-6} \text{ kg-cal m}^{-1} \text{ sec}^{-1}(^{\circ}\text{K})^{-1}$	4.0674×10 ⁻⁶ BTU ft ⁻¹ sec ⁻¹ (°R) ⁻¹	
L_0	6.6328×10 ⁻⁸ m	2.1761×10^{-7} ft	
M_0	28.9644 (dimensionless)	28.9644 (dimensionless)	
n_0	$2.5471\times10^{28} \text{ m}^{-8}$	7.2127×10 ²⁸ ft ⁻³	
$*P_0$	1.013250×10^{5} newtons m ⁻²	2116.22 lbf ft-2	
*T ₀	288.15° K	518:67° R	
\overline{V}_0	458.94 m sec ⁻¹	1505.7 ft sec-1	
70	$1.4607 \times 10^{-5} \text{ m}^2 \text{ sec}^{-1}$	1.5723×10 ⁻⁴ ft ³ sec ⁻¹	
μ0	$1.7894 \times 10^{-6} \text{ kg m}^{-1} \text{ sec}^{-1}$	1.2024×10 ^{-t} lb ft ⁻¹ sec ⁻¹	
ν ₀	6.9193×10° sec-1	6.9193×10° sec-1	
*p0	1.2250 kg m ⁻⁸	0.076474 lb ft ⁻⁸	
*σ ₀	$3.65 \times 10^{-10} \text{ m}$	11.975×10 ⁻¹⁰ ft	
ωο	12.013 kg m ⁻² sec ⁻²	2.4605 lb ft ⁻² sec ⁻²	

^{*}These values are adopted for purposes of computation. The remaining values are derived from the adopted values.

I.2.9 Absolute temperature.—The absolute temperature (in °K) of the melting point of ice under a pressure of 101,325.0 newtons m⁻² is taken as

$$T_{1}=273.15^{\circ} \text{ K}$$

based on the internationally adopted redefinition of the Kelvin scale. Temperatures T on the absolute scale (°K) are taken as

$$T = T_i + t$$
 I.2.9-(1)

where t is the temperature on the Celsius scale (°C). The magnitudes of the Kelvin and the Celsius degrees are equal.

Determination of the value of atmospheric temperature T at great altitudes, using conventional measuring techniques, requires a knowledge of molecular weight M of the air at that altitude. Without this knowledge of molecular weight, measurements yield only the value of T/M. Because of the uncertainty in the value of M at high altitudes, the temperature measurements from rockets are derived from the ratio T/M. This ratio, however, may be shown to relate the basic atmospheric properties of pressure, density, specific weight, scale height, particle speed, and speed of sound to altitude. That is, the altitude function of this ratio defines the altitude function of these properties. Thus, it is possible to find values of T to the degree of reliability with which M can be determined.

I.2.10 PRESSURE.—Within an atmospheric layer throughout which T_M is a linear function of H, the hydrostatic equation and the perfect gas law yield the following expression for the pressure:

$$\begin{split} \log_{s} P = & \log_{s} P_{b} - \frac{g_{0}}{L'_{M}} \frac{M_{0}}{R^{*}} \log_{s} \frac{L'_{M}(H - H_{b}) + T_{M, b}}{T_{M, b}} \\ & (L'_{M} \neq 0) \quad \text{I.2.10-(1)} \end{split}$$

$$\log_{e} P = \log_{e} P_{b} - \frac{g_{0}M_{0}}{R^{*}} \frac{1}{T_{M,b}} (H - H_{b})$$

$$(L'_{M} = 0) \quad I.2.10 - (2)$$

Or, alternately,

$$\frac{P}{P_b} = \left(\frac{T_{M,b}}{T_{M,b} + L'_{M}h}\right)^{\frac{g_0 M_0}{R^2 L'_{M}}} \qquad (L'_{M} \neq 0) \quad \text{I.2.10-(3)}$$

ond

$$\frac{P}{P_b} = \exp\left(-\frac{g_0 M_0 h}{R^* T_{M,b}}\right)$$
 (L'_M=0) I.2.10-(4)

wherein

$$h=H-H_b$$

The foregoing expressions, which are in terms of geopotential height, H, are used to 90 km. Since geometric height is used from 90 to 700 km (ref. 13), the expression for pressure within a layer throughout which T_M is a linear function of geometric altitude Z is given by:

$$\log_{e} P = \log_{e} P_{b} - \frac{1}{L_{M}} \frac{M_{0}}{R^{*}} \int_{z_{b}}^{z} \frac{g \, dZ}{Z - Z_{b} + \frac{T_{M, b}}{L_{M}}} \qquad (L_{M} \neq 0)$$
I.2.10-(5)

one

$$\log_{e} P = \log_{e} P_{b} - \frac{M_{0}}{R^{*}} \int_{z_{b}}^{z} \frac{g \, dZ}{T_{M,b}} \qquad (L_{M} = 0) \quad \text{I.2.10-(6)}$$

Since L_M is always greater than zero in the altitude range 90 to 700 km, equation I.2.10-(6) is not required herein, but is retained for completeness.

The variation of pressure with height is given in figure I.2.10.

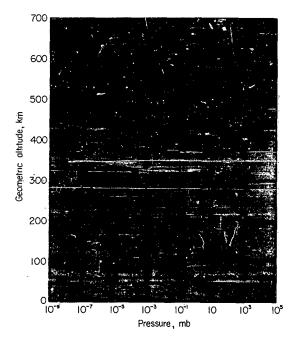


Figure 1.2.10.—Pressure P as a function of geometric altitude Z.

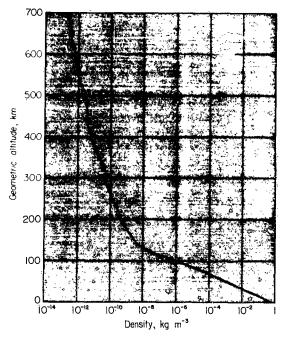


Figure I.2.11.—Density ρ as a function of geometric altitude Z.

I.2.11 Density.—The density can be calculated from the pressure (see section I.2.10) and the molecular-scale temperature (see section I.2.6) by means of the perfect gas law:

$$\rho = \frac{M_0}{R^*} \frac{P}{T_M}$$
 I.2.11-(1)

Variation of density with geometric altitude is given in figure I.2.11.

1.3 DERIVED QUANTITIES

I.3.1 Specific weight.—The specific weight ω is the weight per unit volume, that is,

$$\omega = \rho g$$
 I.3.1-(1)

Equation I.3.1-(1) and the perfect gas law yield

$$\omega = \rho g = g \frac{M_0}{R^*} \frac{P}{T_M} \qquad \qquad \text{I.3.1-(2)}$$

Figure I.3.1 gives a graphical representation of specific weight with geometric altitude.

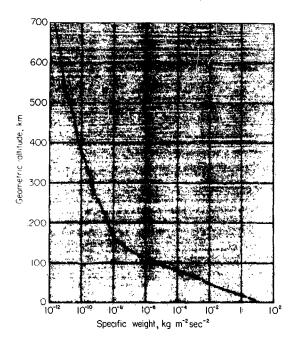


Figure I.3.1.—Specific weight ω as a function of geometric altitude Z.

I.3.2 SCALE HEIGHTS.—The pressure scale height (see fig. I.3.2) is widely used and hence is included among the tabular quantities. Pressure scale height is defined by

$$H_{P} = \frac{R^{*}}{M_{0}} \frac{T_{M}}{g} \qquad I.3.2-(1)$$

In terms of H_P the pressure ratio is

$$\frac{P}{P_0} = \exp\left(-\int_0^z \frac{dZ}{H_P}\right) \qquad I.3.2-(2)$$

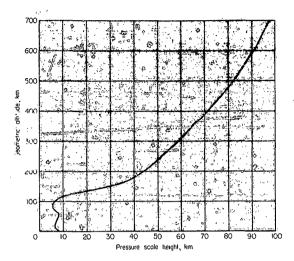


FIGURE I.3.2.—Pressure scale height H_P as a function of geometric altitude Z.

The density scale height H_{ρ} is defined by

$$H_{\rho} = \frac{H_{P}}{1 + \frac{R^{*}}{M_{n}g}} \frac{dT_{M}}{dZ}$$
 I.3.2-(3)

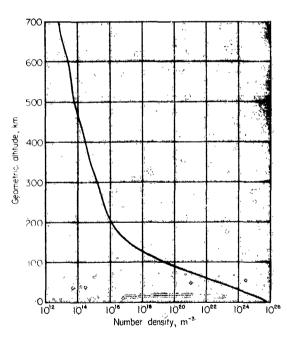


FIGURE I.3.3.—Number density n as a function of geometric altitude Z.

I.3.3 NUMBER DENSITY.—The number density of air is defined to be the number of atmospheric particles per unit volume and the particles are considered to be neutral. The expression used is

$$n = \frac{M_0}{R^*} \frac{NP}{MT_M} \qquad \qquad \text{I.3.3-(1)}$$

wherein N is Avogadro's number and M is the molecular weight. The variation of number density with geometric altitude is given in figure I.3.3.

I.3.4 MEAN AIR-PARTICLE SPEED.—The mean airparticle speed is the arithmetic average of the speeds of all air particles in the volume element being considered. All particles are considered to be neutral. For a valid average to occur, there must, of course, be a sufficient number of particles involved to represent mean conditions. Pressure and temperature gradients within the volume must also be negligible. The mean particle speed is given by

$$\overline{V} = \left(\frac{8}{\pi} \frac{R^*}{M_0} T_M\right)^{1/2}$$
 I.3.4-(1)

The variation of particle speed with geometric altitude is shown in figure I.3.4.

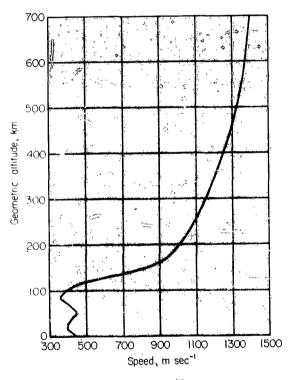


FIGURE I.3.4.—Mean particle speed \overline{V} as a function of geometric altitude Z.

I.3.5 Mean free path.—The mean free path L is the mean value of the distances traveled by each of the neutral particles, in a selected volume, between successive collisions with other particles in that volume. As before, a meaningful average requires that the selected volume be big enough to contain a

large number of particles. The computational form for \boldsymbol{L} is

$$L = \frac{1}{(2)^{1/2}\pi N\sigma^2} \frac{R^* MT_M}{M_0} \qquad I.3.5-(1)$$

This expression at great altitudes is only valid under assumptions that hold M, T_M , P, and σ constant throughout the volume used. Figure I.3.5 depicts the mean free path in terms of altitude.

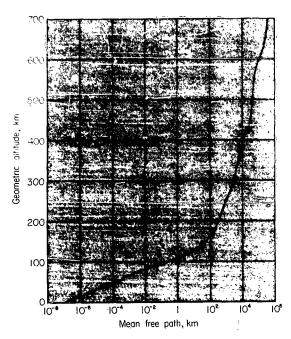


FIGURE I.3.5.—Mean free path L as a function of geometric altitude Z.

I.3.6 Collision frequency.—The average collision frequency ν is the average speed of the air particles within a selected volume divided by the mean free path L of the particles within that volume. That is,

$$v = \frac{\overline{V}}{\overline{I}}$$
 I.3.6-(1)

and in computational form:

$$\nu = 4\sigma^2 N \left(\pi \frac{M_0}{R^*}\right)^{1/2} \frac{P}{M(T_M)^{1/2}}$$
 I.3.6-(2)

Note that σ is the effective collision diameter of the mean air particle. The foregoing expressions are taken to apply to neutral particles only, since no considerations involving charged particles are introduced for purposes of developing the main tables.

Figure 1.3.6 graphically displays the variation of collision frequency with altitude. See section 1.3.4 for a discussion of the assumptions under which equation 1.3.6-(2) is valid at great altitudes.

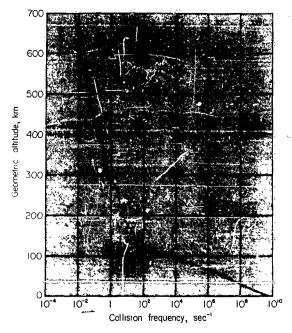


FIGURE I.3.6.—Collision frequency ν as a function of geometric altitude Z.

I.3.7 Speed of sound.—The expression adopted for the speed of sound is

$$C_s = \left(\gamma \frac{R^*}{M_0} T_M\right)^{1/2}$$
 I.3.7-(1)

It is to be noted that γ is the ratio of specific heat of air at constant pressure to that at constant volume, and is taken to be 1.40 exact (dimensionless). Equation I.3.7–(1) for the speed of sound applies only when the sound wave is a small perturbation on the ambient condition. Calculated values of C, have been found to vary slightly from experimentally determined values.

The limitations of the concept of velocity of sound due to extreme attenuation are also of concern. The attenuation which exists at sea level for high frequencies applies to successively lower frequencies as atmospheric pressure decreases, or as the mean free path increases. For this reason the concept of speed of sound (except for frequencies approaching zero) progressively loses its range of applicability at high altitudes. Hence, the main tables terminate entry of values for speed of sound at 90 km.

Figure I.3.7 shows the variation with altitude of the computed speed of sound.

I.3.8 COEFFICIENT OF VISCOSITY.—The coefficient of viscosity is defined as a coefficient of internal friction developed where gas regions move adjacent to each other at different velocities. The following expression, basically from kinetic theory, but with

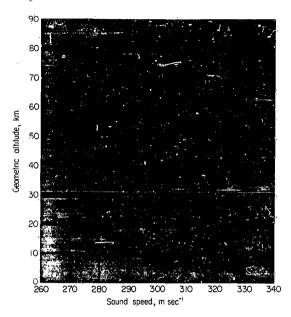


Figure 1.3.7.—Sound speed C_s as a function of geometric altitude Z.

constants derived from experiment, is used for computation of the tables:

$$\mu = \frac{\beta T^{3/2}}{T + S}$$
 I.3.8-(1)

In this equation β is a constant equal to 1.458×10^{-6} kg sec⁻¹ m⁻¹(°K)^{-1/2} (exact) and S is Sutherland's constant, equal to 110.4° K (exact).

Equation I.3.8-(1) fails for conditions of very high and very low temperatures and under conditions occurring at great altitudes. (Consequently tabular entries for coefficient of viscosity are terminated at 90 km.) For these reasons caution is necessary in making measurements involving probes and other objects that are small with respect to the mean free path of molecules in the region of 32 to 90 km.

The variation of the coefficient of viscosity with altitude is shown in figure 1.3.8.

I.3.9 KINEMATIC VISCOSITY.—Kinematic viscosity is defined as the ratio of the coefficient of viscosity of a gas to the density of that gas; that is,

$$\eta = \frac{\mu}{0}$$
 I.3.9-(1)

Limitations of this equation are comparable to those discussed in section I.3.8, and consequently tabular entries of kinematic viscosity are also terminated at the 90-km level. See figure I.3.9 for a graphical representation of the variation of kinematic viscosity with altitude.

I.3.10 COEFFICIENT OF THERMAL CONDUCTIVITY.—
The empirical expression (ref. 3) adopted for pur-

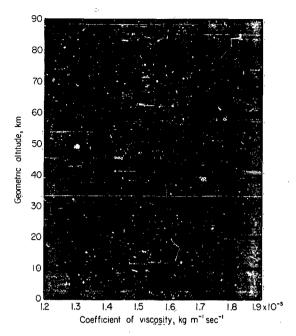


FIGURE I.3.8.—Coefficient of viscosity μ as a function of geometric altitude Z.

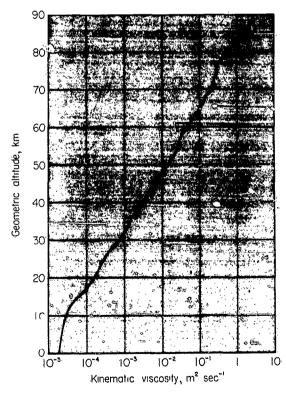


FIGURE I.3.9.—Kinematic viscosity η as a function of geometric altitude Z.

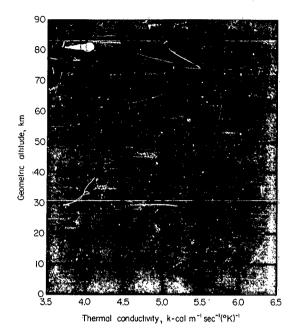


FIGURE I.3.10.—Coefficient of thermal conductivity k as a function of geometric altitude Z.

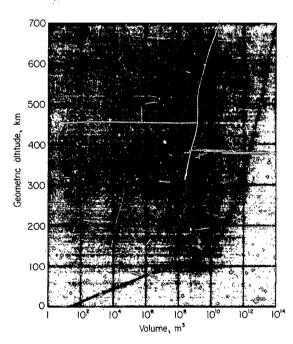


FIGURE I.3.11.—Mole volume v as a function of geometric altitude Z.

poses of developing tabular values of the coefficient of thermal conductivity to the 90-km level is as follows:

$$k = \frac{6.325 \times 10^{-7} T^{8/2}}{T + 245.4 \times 10^{-(12/T)}}$$
 I.3.10-(1)

Kinetic-theory determinations of thermal conductivity of some monatomic gases agree well with observation. For these gases thermal conductivity is directly proportional to the coefficient of viscosity. Modification of the simple theory has accounted in part for differences introduced by polyatomic molecules and by mixtures of gases. Tabular entry of values for coefficient of thermal conductivity is terminated at 90 km. The variation with height of this quantity is shown in figure I.3.10.

I.3.11 MOLE VOLUME.—While not tabulated, mole volume enters into certain ancillary calculations. It is defined as the volume per mole; that is,

$$v = \frac{M}{\rho} = \frac{R^*}{M_0} \frac{MT_M}{P}$$
 I.3.11-(1)

Figure I.3.11 gives the relationship between mole volume and altitude.

1.4. TABLES OF UNITS, CONVERSION FACTORS, AND DEFINING PROPERTIES

TABLE I.4(a).-METRIC TO ENGLISH CONVERSIONS OF UNITS OF LENGTH, MASS, AND GEOPOTENTIAL

A. Defined relations (the constants are adopted as being exact): =0.3048 meter

feet

1 foot

A. Defined:

В.

1 i.n. mi	=1,852 meters		
1 pound	=0.45359237 kilogram		
1 standard geopotential	=0.3048 standard geopo-		
foot	tential meter		
Derived relations:			
1 meter	=3.2808399 feet		
1 meter	$=5.3995680 \times 10^{-4} i.n. mi$		
1. kilogram	=2.2046226 pounds		
1 i.n. mi	=6,076.1155 feet		
1 foot	$=1.6457883 \times 10^{-4} i.n. mi$		
1 standard geopotential meter	=3.2808399 standard geo- potential		

TABLE I.4(b).-METRIC TO ENGLISH AND ABSOLUTE TO NONABSOLUTE CONVERSIONS OF TEMPERATURE UNITS

$$t(^{\circ}C) = T(^{\circ}K) - T_{i}(^{\circ}K), \text{ where } T_{i}(^{\circ}K) = 273.15(^{\circ}K)$$

$$T(^{\circ}R) = 1.8T(^{\circ}K)$$

$$t(^{\circ}F) - t_{i}(^{\circ}F) = T(^{\circ}R) - T_{i}(^{\circ}R), \text{ where } t_{i}(^{\circ}F) = 32(^{\circ}F)$$
B. Derived relations:
$$t_{i}(^{\circ}C) = 0(^{\circ}C)$$

$$T_{i}(^{\circ}R) = 491.670(^{\circ}R)$$

$$t(^{\circ}C) = [T(^{\circ}R) - T_{i}(^{\circ}R)]/1.8 = [t(^{\circ}F) - t_{i}(^{\circ}F)]/1.8$$

$$T(^{\circ}R) = 1.8[t(^{\circ}C) + 273.15(^{\circ}C)] = t(^{\circ}F) - t_{i}(^{\circ}F) + 491.670(^{\circ}R)$$

$$t(^{\circ}F) - 32(^{\circ}F) = 1.8t(^{\circ}C) = 1.8[T(^{\circ}K) - 273.15(^{\circ}K)]$$

Table I.4(e).—Defining properties of the standard atmosphere

FORCE	I.4(c).—Abso . gravitatio	OLUTE SYSTEMS NAL SYSTEM OF	OF UNITS TO UNITS, METRIC	ABSOLI ENGLIS
A. Defin 1 for B. Deri 1 kg 1 kg 1 lbf 1 lbf 1 lbf	ned: ce unit=1 m ved relations f = 9.80665 k $= \frac{1}{9.80665} k_5$ = 0.4535925 = 32.174049	ass unit $\times g_0$: g m sec ⁻² + g sec ² m ⁻¹ =0. R kgf l b ft sec ⁻² 50 lbf sec ² ft ⁻ 550 slug	10197162 kgf s	
	ļ			

TABLE I.4(d).—THERMAL	то	MECHANICAL	units,	METRIC-
	Eng	LISH		

A.	Defined relations:*	

1 kg-cal =
$$\frac{1}{860}$$
 kw-hr (exact)

1 kg-cal=
$$\frac{1.8}{0.45359237}$$
 BTU=3.9683207 BTU

1 joule=1 watt-sec

B. Derived relations:

1 kw-hr=
$$3.6\times10^6$$
 watt sec= 3.6×10^6 joules

1 kg-cal=
$$\frac{3.6\times10^6}{860}$$
 joules=4,186.0465 joules

 $=4,186.0465 \text{ kg m}^2 \text{ sec}^{-2}$

1 kg-cal=
$$\frac{3.6\times10^6}{860\times9.80665}$$
m kgf=426.85795 m kgf

$$1~kg\text{-cal} = \frac{3.6 \times 10^{8}}{860 \times 9.80665 \times 0.453592 \text{C}7 \times 0.3048}~\text{ft lbf}$$

=3087.4696 ft lbf

1 BTU =
$$\frac{0.45359237}{1.8}$$
 kg-cal = 0.25199576 kg-cal

$$1~BTU = \frac{3.6 \times 10^6}{860 \times 0.3048 \times 9.80665 \times 1.8} \text{ ft lbf}$$

=778.02922 ft lbf

1 BTU =
$$\frac{3.6 \times 10^6}{860 \times (0.3048)^2 \times 1.8}$$
 lb ft² sec-²

=25032.349 lb ft² sec⁻²

[&]quot;The calorie used here is the International Steam Table calorie and the joule is the mean international joule.

ATMOSPHERE						
Altitude, H, km	Molecular- scale tem- perature, T_M , °K	Gradient, L'M, °K/km	Molecular weight, M	Kinetic temper- ature, T, °K		
0.000	288. 15		28. 9644	288. 15		
11, 000	216. 65	-6.5	28.:9644	216. 65		
20, 000	216. 65	0. 0	28. 9644	216. 65		
32. 000	228 . 65	+1.0	28. 9644	228. 65		
47. 000	270. 65	+2.8	28. 9644	270. 65		
52, 000	270. 65	0.0	28. 9644	270. 65		
61, 000	252, 65	-2.0	28. 9644	252, 65		
79. 000	180. 65	-4.0	28. 9644	180. 65		
88, 743	180, 65	0.0	28. 9644	180. 65		
Altitude, Z, km	Molecular- scale tem- perature, T _M , °K	Gradient, Lw, °K/km	Molecular weight, M	Kinetic temper- ature, T, °K		
90	180. 65		28, 9644	180. 65		
100	210. 65	+3	28. 88	210. 02		
110	260, 65	+5	28. 56	257. 00		
120	360. 65	+10	28. 07	349. 49		
150	960. 65	+20	26, 92	892, 79		
160	1, 110. 65	+15	26, 66	1, 022. 2		
170	1, 210. 65	+10	26. 40	1, 103. 4		
190	1, 350. 65	+5	25. 85	1, 205. 4		
230	1, 550. 65	+4	24. 70	1, 322. 3		
300	1, 830. 65	+3.3	22, 66	1, 432. 1		
400	2, 160. 65	+2.6	19. 94	1, 487, 4		
500	2, 420. 65	+1.7	17. 94	1, 499. 2		
800	2, 590. 65	+1.1	16. 84	1, 506. 1		
700	2, 700. 65		16. 17	1, 507. 6		

PART II

Additional Information Relating to the Atmosphere

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PART II

Additional Information Relating to the Atmosphere

II.0 INTRODUCTION

Part II of this document gives additional information relating to the atmosphere. This additional information will be found useful in extending the scope of Parts I and III, as well as in gaining an appreciation of trends in knowledge of the earth's atmosphere.

II.1 VALIDITY

The validity of Parts I and III of this document, insofar as the equations and fundamental numbers (constants) are concerned, is satisfactorily established by references and discussion throughout Part I. It is in the domain of validity of the assumptions made in Part I that further examination is necessary.

It will be recalled from the foreword and from Part I that the U.S. Standard Atmosphere, 1962 is an idealized, middle-latitude (approximately 45°) year-round mean over the range of solar activity between sunspot minima and maxima. It is further assumed in Part I that the atmosphere is a perfect gas, that it rotates everywhere with the earth, and that it is composed of neutral particles. Despite these assumptions, however, the adopted temperature profile (and molecular-weight profile) are based upon experimentally determined values, modified slightly to achieve easily computable gradients. To some extent, therefore, implicit account is taken of the real features of the atmosphere; that is, the standard is considerably more realistic than the simplifying assumptions would indicate.

Clearly, however, the real atmosphere differs from the standard and there are, of course, recognized departures, both temporal and spatial. Furthermore, in the higher reaches of the atmosphere the facts are well enough established now to extend the speculative region to 700 km with greater confidence than heretofore. For these reasons the systematic variations and observed (or inferred) extremes are discussed in the following section.

II.2 SYSTEMATIC VARIATIONS AND OBSERVED AND INFERRED EXTREMES

II.2.1 SEA LEVEL TO 90 KILOMETERS.—In the 0-to 90-km region, latitudinal and seasonal variations about the mean are present. In addition, both observation and inference show that extreme values of considerable magnitude exist. This information is

being developed in detail in a series of supplemental atmospheres to be published.

A family of nine atmospheres, extending up to 90 km, is being prepared under the direction of COESA. They include a mean annual atmosphere for 15° N. latitude (a region of small seasonal change) and January and July atmospheres for 30°, 45°, 60°, and 75° N. latitude. These atmospheres, supplemental to the U.S. Standard Atmosphere, 1962, will provide information to scientists and engineers on latitudinal, seasonal, and interdiurnal changes in atmospheric structure in order that they may investigate the importance of these departures from the standard in experiments and designs.

Based on preliminary work on these supplemental atmospheres for latitudes 15° to 60° N., envelopes of mean seasonal densities and temperatures have been estimated and are given in figures II.2.1(a) and II.2.1(b) for altitudes up to 90 km. The values shown by the envelope curves of any of the thermodynamic properties of the atmosphere could not possibly be encountered at all altitudes at any given location and time. The warmest surface layers in the tropics are associated with the coldest tropopause level, for example.

Systematic density variations.—The estimated range of systematic changes (seasonal and latitudinal variations, equator to 60° N.) of density is indicated by horizontal arrows in figure II.2.1(a) as percentage departures from standard. Above 30 km, both the largest negative and the largest positive departures occur at 60° N. latitude. The negative departures represent mean winter conditions and the positive departures represent mean summer conditions. Below 30 km, the range cannot be depicted for all levels by the maximum and minimum seasonal values at only one latitude.

The minimum latitudinal and seasonal variability, less than 1 percent, occurs at the isopycnic level near 8 km. Other levels of minimum variability, less pronounced than at the isopycnic level, occur at 26 and 85 km. Maximum seasonal and latitudinal variations occur near 15 and 70 km.

Extremes of density.—Observed extremes of density at levels above 30 km are indicated by circles in figure II.2.1(a). The minimum values were derived by Jones and Peterson (ref. 14) from a 27 January 1958 falling-sphere experiment at Fort Churchill,

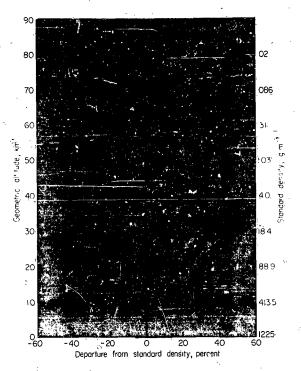


FIGURE II.2.1(a).—Range of systematic variability of density about the U.S. Standard Atmosphere, 1962.

Canada. The maximum densities above 40 km were observed by Nelson W. Spencer from a 15 July 1958 rocket flight (pressure sensor) at Fort Churchill, Canada (ref. 30).

Temperature variations.—Extreme temperature observations and mean seasonal variations about the U.S. Standard Atmosphere, 1962 are shown in figure II.2.1(b). The range of mean winter and summer temperatures, shown as horizontal arrows, is based upon hemispheric radiosonde data to 30 km. Between 30 and 60 km it is based on observations from instruments released by meteorological rockets from nearly a dozen northern-hemisphere launching sites. The extreme observations and the variations above 60 km have been extracted from other rather sparse rocket data. These rocket instruments include rocket-grenade temperature experiments, pitot-static pressure measurements, falling-sphere density measurements, and rocket-network temperature thermistors (to 50 km).

Both seasonal fluctuations and observed values are least accurate above 60 km, where direct temperature measurements are apparently subject to greatest errors. The data at these levels are based primarily on very few rocket-grenade observations which involve the use of sound ranging in deriving temperature and wind velocity. Most of the temperature extremes below 50 km are based on thermistor ob-

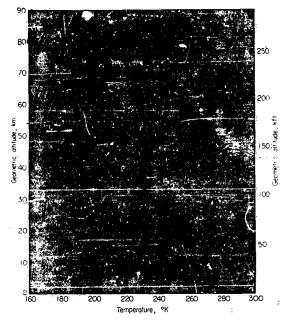


FIGURE II.2.1(b).—Range of systematic variability of temperature about the U.S. Standard Atmosphere, 1962.

servations from the many flights of the recently organized semioperational Meteorological Rocket Network (MRN).

Except at the surface, and at heights above 60 km where warm winter temperatures at 60° N. latitude cause large positive departures, the U.S. Standard Atmosphere, 1962 temperature profile lies near the center of the winter and summer seasonal range. Near 60 km, winter and summer temperature profiles at all latitudes approach or cross the standard. From 60 km to at least 90 km, winter temperatures generally are warmer and summer temperatures cooler than the standard (ref. 15).

II.2.2 90 KILOMETERS TO 200 KILOMETERS.—Within the region of 90 to 200 km only observed and inferred extremes are sufficiently well established to warrant discussion. The paucity of data in this region does not permit discussion of systematic variations.

It must be remembered that when data are obtained with various types of measuring equipment (some of it of an experimental nature) the maximum spread in the measured values of a given parameter (the extremes of measured data) may not be at all representative of the actual variability of that parameter. This should be kept in mind when considering measured values of atmospheric properties in the range of 90 to 200 km.

Extremes: of molecular-scale temperature.—Figure II.2.2(a) shows experimental values of molecular-scale temperature compared with those of the stand-

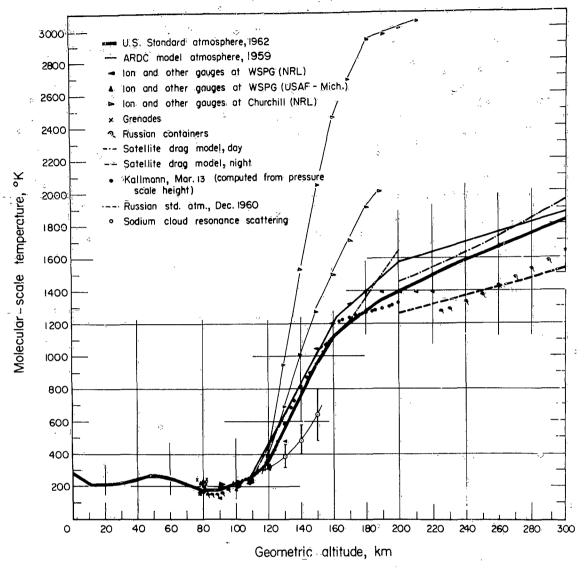


FIGURE II.2.2(a).—Molecular-scale temperatures of U.S. Standard Atmosphere, 1962 compared with ARDC Model Atmosphere, 1959 and with available data.

ard, the ARDC Model Atmosphere, 1969 (ref. 10), and the USSR Standard Atmosphere, 1960. The experimental data were obtained primarily at the White Sands Proving Ground, at Churchill, and at Russian rocket-launching sites. All the data presented lie within 100° K of the U.S. Standard Atmosphere, 1962 (in the 90- to 200-km range) except for three sets of measurements. Two of these measurements, for which the temperatures were substantially higher, were made at Churchill (at high geomagnetic latitude) during the International Geophysical Year near the peak of solar activity, when solar flares were frequent. Thus, not only was the solar 10.7-cm wavelength flux about

350×10⁻²² watts m⁻²/(cycle sec⁻¹) (see section II.3), for which a daytime temperature of 2,000° K to 2,200° K would be predicted at 200 km at low latitudes, but the corpuscular radiation would be expected to be particularly intense. For these reasons, the measured temperatures are probably reasonably accurate, but apply under very unusual conditions. The third set of measurements gives temperatures as much as 300° K below the standard. The measurements were made in terms of the Doppler broadening of the D lines of sodium released in the atmosphere. The reason that these measurements yield lower temperatures is not understood, particularly since this technique has yielded temperatures

(ref. 16) of 1,450° K at higher altitudes in good agreement with other data.

Extremes of density.—Density measurements are compared with the U.S. Standard Atmosphere, 1962 in figure II.2.2(b). It is believed that the two sets of points with very low densities obtained with mass spectrometers between 150 and 210 km are not accurate. The lowest of these was obtained with a Bennett type mass spectrometer at Churchill, Canada, on 20 November 1956. This was an early flight with this mass spectrometer and evidently the instrument did not function well, as can be seen by the apparent increase in density between 200 and 210 km indicated by the instruments. Because the signal strength was small compared with the background, the accuracy of the White Sands Proving Ground ion gauge measurements, which gave low densities above 130 km, is poor. The other data points shown in figure II.2.2(b) are probably reasonably accurate. However, they represent conditions ranging from night to day and minimum to maximum solar activity. At 90 km the measured values lie within a factor of less than 2 on either side of the mean density. The actual atmospheric density probably lies within a factor of 2 on either side of the mean value up to 200 km, although the range of variability is slowly increasing at higher altitudes.

Extremes of pressure.—In figure II.2.2(c) pressure data are compared with the standard. These data are basically the same as those in figure II.2.2(b), from which they are derived by means of the gas The mass-spectrometer data are not included. Since in this altitude region pressure is derived from density and the slope of the density curve, the variation in the derived values of pressure will be greater than the variation in the density measurements. This does not necessarily imply that the actual variation in atmospheric pressure is any greater than that in the density. At 90 km, pressures as high as three times the standard have been measured. 120 km the range is a factor of about 2.5 on either side of the mean. This range gradually increases until it is almost a factor of 4 on either side of the mean at 200 km altitude. Data shown in figures II.2.2(a), (b), and (c) are drawn from investigations of a number of authors (refs. 17 to 32).

II.2.3 200 KILOMETERS TO 700 KILOMETERS.—Systematic variations are identifiable in the 200-to 700-km range, but insufficient data exist to deal with extreme values. These systematic variations have been available only since the analysis of drag effects on the motions of artificial satellites.

An analysis of atmospheric drag effects on the motion of artificial satellites has revealed the existence of large density fluctuations in the atmosphere above the height of 200 km withough several classes of fluctuation can be included (that is, characteristic amplitude vs. frace pattern), all have

1. Buy

ene feature in common—they are caused by variations in heating of the earth's atmosphere due to variations in energy coming from the sun. In addition to erratic and semiperiodic changes, there is a more regular diurnal variation connected with the position of the sun with respect to the zenith.

The atmospheric model.—Since all the density fluctuations, including the diurnal variation, are of thermal origin, and since the kinetic temperature above 300 km is essentially independent of height, it would be convenient and much simpler to use the kinetic temperature as a parameter to describe atmospheric variations. Unfortunately, the observed quantity is the density, not the temperature. In order to convert densities into temperatures, there must first be generated a good atmospheric model in which densities are tabulated for many different temperatures. Nicolet's 1961 model (ref. 33) has been shown by Jacchia (refs. 34 and 35) to be adequate for the purpose, at least for heights above 300 km. This model is based on diffusion equilibrium, with known boundary conditions at a height of 120 km, with densities as a function of height for 12 standard top-atmospheric temperatures ranging from 773° K to 2,133° K; thus it is possible to interpolate the temperature when a density is given for a specified height, and the reverse. All the temperatures mentioned in this portion of the discussion are top-atmospheric temperatures derived from densities by means of Nicolet's 1961 model. It is to be noted that Nicolet has developed atmospheric models based on diffusion equilibrium in which helium plays a role. Heat conduction is the essential process that determined the gradient of the temperature.

Introduction of boundary conditions at 120 km, where diffusion begins for major constituents, leads to atmospheric models that can be used for analysis of day-to-night and solar activity variations in the whole thermosphere from 150 to 2,000 km. An analysis of the behavior of the heterosphere (i.e., of the terrestrial atmosphere where the mean molecular mass cannot be taken as a constant parameter) requires a theoretical study to supplement observational results from which it is not yet possible to obtain all the parameters needed for a complete picture of the physical conditions.

The variations of temperature and molecular weight with height in Nicolet's model differ from those adopted in the U.S. Standard Atmosphere, 1962. As a consequence, a temperature profile derived from Nicolet's tables for the densities of the present model shows considerable difference from the temperature profile in table I of reference 13. These differences are shown in table II.2.3(a).

As can be seen, apart from the critical region around a geometric height of 200 km, the difference in temperature between the two atmospheric models is about 200° K on the average, and it can be said

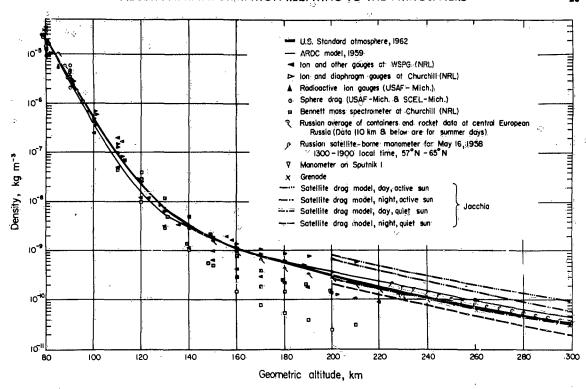


FIGURE II.2.2(b).—Density of U.S. Standard Atmosphere, 1962 compared with ARDC Model Atmosphere, 1969 and with available data.

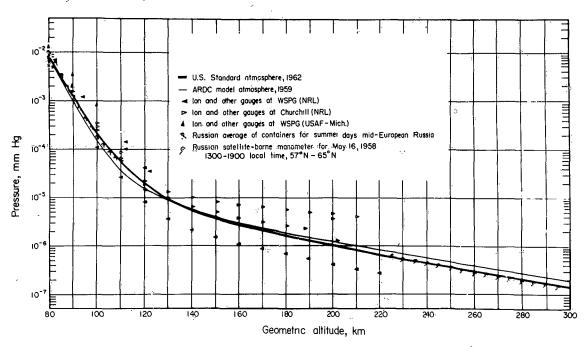


FIGURE II.2.2(c).—Pressures of U.S. Standard Atmosphere, 1962 compared with ARDC Model Atmosphere, 1959 and with available data.

TABLE II.2.3(a).—TEMPERATURE DIFFERENCES BETWEEN THE PRESENT ATMOSPHERIC MODEL AND NICOLET'S 1961 MODEL

Ì		T	emperature	e, °K
Z, km	*log ₁₀ p	Present model	Nicolet	Difference
200	12, 480	1, 236	900	336
300	—13, 446	1, 432	1, 184	248
400	—14: 188	1, 487	1, 248	239
500	-14.803	1, 499	1, 282	217
600	— 15. 334	1, 506	1, 316	. 190
700	-15.814	1,508	1, 339	169

^{*}For o in gm cm-1.

that, to a fair approximation, the quasi-asymptotic temperature of 1,500° K of the present model corresponds to an asymptotic temperature of 1,300° K in Nicolet's model. Therefore, the Nicolet temperature of 1,300° K will be taken as representative of the present model and density corrections will be computed on the basis of Nicolet's model for temperatures other than 1,300° K.

Causes of variations.—Upper-atmospheric temperature variations, and the density variations that occur as a consequence thereof, can be divided into three categories:

- (a) Variations caused by the variable position of the sun with respect to a given point above the earth's surface
- (b) Fluctuations caused by variations in the extreme ultraviolet flux from the sun
- (c) Fluctuations caused by variations in the corpuscular flux from the sun

Since observations indicate that through all these variations the temperature above 300 km remains, to a first approximation, rather independent of height, it must be assumed that most of the heating, both electromagnetic and corpuscular, occurs at heights below 300 km. The variations under (a) are usually referred to as the diurnal effect (refs. 36 to 38) and probably result from heat generated by absorption of ultraviolet radiation (ref. 39).

The diurnal bulge.—The maximum temperature seems to occur at a point on the globe about 30° eastward in longitude from the subsolar point. This is the center of the "diurnal bulge." (See refs. 35 and 40.) At this point, the temperature is about 40 percent higher than that at the point of minimum, in the dark hemisphere. Although the decrease in temperature from the center of the diurnal bulge outward is almost certainly not axially symmetric, a good approximation can be obtained by assuming that it is. If T_N denotes the minimum nighttime temperature, the temperature T at an angular distance ψ from the center of the bulge can be represented by

$$T = T_N \left(1 + 0.4 \cos^n \frac{\psi'}{2} \right)$$
 (4

Because of the periodic change in latitude of the subsolar point, the day-to-night variation at any single point on the globe is dependent on the season. This seasonal effect, however, is automatically accounted for by equation II.2.3–(1).

Extreme ultraviolet flux.—The variations mentioned in the section Causes of variations, category (b), are generally erratic, although the 27day period of the solar rotation can often be recognized in them over extended intervals (ref. 41). Among the various solar parameters, a good and quickly available index is the decimetric flux from the sun (refs. 36 and 42), which apparently varies in the same general manner as the extreme ultraviolet solar emission. Under constraints of time intervals of a few months, it is found that variations $\Delta_{\Gamma}T_{N}$ in the nighttime temperature are proportional to variations ΔF_{10} in the daily means F_{10} of the 10.7-cm solar flux measured by the National Research Council, Ottawa, Canada. When F_{10} is expressed in units of 10^{-22} watts $m^{-2}/(cycle\ sec^{-1})$, then

$$\Delta_1 T_N = 2.5 \Delta F_{10}$$
 II.2.3-(2)

Corpuscular effects.—The corpuscular heating referred to under Causes of variations, category (c), manifests itself in a semiannual variation (refs. 43 and 44) superimposed on a slow fluctuation with the 11-year solar cycle (ref. 35). In addition, there are short-lived, spasmodic perturbations that parallel magnetic storms both in duration and intensity (ref. 45). The slow variations may be related to a "solar wind," which would provide a smooth background for the more violent corpuscular storms.

If the decimetric solar flux F_{10} is smoothed by taking monthly means, a variation is obtained which correlates with the 11-year solar cycle. It is thus not a simple matter to separate the ultraviolet and the slow-varying corpuscular components of atmospheric heating over time intervals even as long as 1 or 2 years. On the other hand, since the form of the 11-year variation in the corpuscular heating is not sufficiently well known, the decimetric flux again appears to be a convenient parameter for representing this variation, provided it is used in the smoothed \overline{F}_{10} (monthly mean) form.

The semiannual oscillations have maxima around April 7 and October 7, in fair agreement with the semiannual oscillation in the geomagnetic indices K_p , C_t , and u. (See refs. 46 to 48.) Their amplitude varies with the solar cycle and can also be expressed as a function of $\overline{F_{10}}$. For lack of better information it is assumed that the oscillation is a sinusoidal function of time.

The contribution of $\Delta_2 T_N$ of the solar wind to the

heating of the nighttime atmosphere can thus be written

$$\Delta_2 T_N = 2\Delta \vec{F}_{10} + 0.5 \vec{F}_{10} \cos \frac{2(t - \text{Apr. 7})}{365}$$
 II.2.3-(3)

Magnetically correlated effects.—During magnetically perturbed days there seems to be a simultaneous increase in the temperature of the entire upper atmosphere proportional to the 3-hour geomagnetic index a_p , the coefficient of proportionality $\Delta T/\Delta a_p$ being of the order of 1.5° or even higher. (See ref 34.) The contribution $\Delta_3 T_N$ of corpuscular storms to the heating of the atmosphere can therefore be written as

$$\Delta_3 T_N = 1.5a_p$$
 II.2.3-(4)

Summary.—In summary, the nighttime temperature (in °K) can be computed from F_{10} , \overline{F}_{10} , and a_p as follows:

$$\begin{split} T_{N} &= \text{Constant} + \Delta_{1} T_{N} + \Delta_{2} T_{N} + \Delta_{3} T_{N} \\ &= 1,025 + 2.5 (F_{10} - 170) + 2.0 (\overline{F}_{10} - 170) \\ &+ 0.5 \overline{F}_{10} \cos \frac{2(t - \text{Apr. } 7)}{365} + 1.5 a_{p} \quad \text{II}.2.3 - (5) \end{split}$$

The maximum daytime-temperature can be taken as $T_D=1.4\,T_N$, and the temperature T at intermediate points on the globe can be computed from equation II.2.3-(1).

Resulting density corrections can now be computed. Table II.2.3(b) gives these corrections to be applied to \log_{10^p} for various temperatures. It is to be noted, of course, that all the equations for computing the temperature are empirical and based on parameters F_{10} and a_p that are indirect indicators of the true energy source. Only a crude approximation can thus be expected from their use. A difficulty in practical applications may be the inevitable delay in obtaining information about the solar and geomagnetic parameters. Some degree of approximation can be achieved by ignoring the short-lived fluctuations—that is, by assuming that a_p is close to zero and by replacing F_{10} with an extrapolated value of \overline{F}_{10} from the curve of monthly means.

II.3 REPRESENTATIONS OF ATMOSPHERIC VARIABLES AS APPROXIMATE ANALYTIC FUNCTIONS OF ALTITUDE

For some applications of the standard atmosphere it is advantageous to have approximate representations of the density and other variables as analytic functions, in closed form, of the altitude. Such representations do not, for example, have the differentiability limitations induced by the polygonal form of the standard molecular-scale temperature profile. Furthermore, approximate finite mathematical formulas frequently afford a considerable advantage, for analytical and computational purposes, over the standard tables.

The method of approximate representation utilized in this section consists essentially of two parts. First, the molecular-scale temperature is approximated by a polynomial function of the geometric altitude; the criterion for this curve fit is that the integral of the squared error be a minimum. Second, this polynomial and a gravitational acceleration which is assumed to vary inversely as the square of the distance from the earth's center are used to integrate a form of the hydrostatic equation. As a result, the pressure and the density are obtained as analytic functions of the altitude. The approximate representations given here have been limited to the geometric altitude range of 0 to 200 km by considerations of accuracy and general utility.

The approximate polynomial expression for the molecular-scale temperature T_M is

$$T_{M} = a_0 + a_1 Z + a_2 Z^2 + \dots + a_n Z^n$$
 II.3-(1)

where Z is the geometric altitude. The sets of coefficients $a_0, a_1, a_2, \ldots, a_n$ are given in table II.3(a) for several values of the polynomial degree n. Accuracy comparisons are shown graphically in figure II.3(a).

The representations of the pressure P and the density ρ through the equations

$$\frac{P}{P_0} = \exp\left(-\frac{M_0}{R^*} \int_0^z \frac{g}{T_M} dZ\right) \qquad \text{II.3-(2)}$$

$$= \frac{\rho}{\rho_0} = \frac{T_0}{T_M} \exp\left(-\frac{M_0}{R^*} \int_0^{t_R} \frac{g}{T_M} dZ\right) \qquad \text{II.3-(3)}$$

Table II.2.3(b).—Corrections to logiop for various top-atmospheric temperatures*

	١.			Co	rrection for	T, 6K, of	<u></u>			
Z, km	800	900	1, 000	1, 100	1, 200	1, 300	1, 500	1, 700	1, 900	2, 100
200	-0. 25	Ö. 14	=0.05	-0.02	-0. 01	0. 00	+0.01	+0.01	0. 00	0.0
300	-0.62	- 0. 40	-0.22	0. 13	0: 0ê	0. 00	+0.08	+0.13	+0.17	+0.2
400	-0.92	-0.61	-0.37	-0.22	-0.10	0.00	+0.15	+0.27	+0.35	+0.4
500 600	-1.16 -1.36	-0, 80 -0, 97	0. 50 0. 62	= 0. 30 = 0. 37	-0. 14 -0. 17	0. 00 0. 00	+0.22 $+0.27$	+0.37 +0.47	+0.49 +0.62	+0.5° +0.7°
700	-1. 30 -1. 40	-0.9% -1.07	-0. 62 -0. 72	-0. 44 -0. 44	-0.17 -0.21	0. 00 0. 00	+0.27 +0.32	+0.56	+0.02	+0.8

^{*}Computed from Nicolet's 1981 model, reference 33.

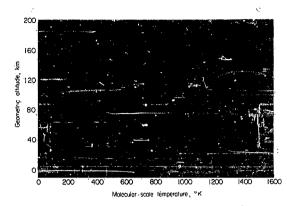


FIGURE II.3(a).—Comparison of polynomial values with standard values of T_M .

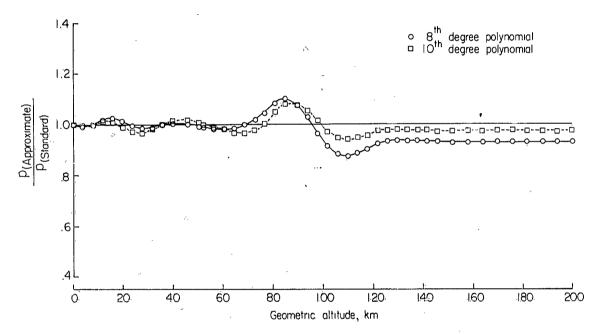
require approximate analytic expressions for the quantity

 $\frac{M_0}{R^*} \int_0^z \frac{g}{T_M} dZ$

II.3-(4)

These analytic expressions, for several values of n, are given in table II.3(b). Pressures and densities computed therefrom are compared graphically with the standard-atmosphere values in figures II.3(b) and II.3(c).

More accurate approximations to the standard atmosphere than those presented herein are clearly possible at the expense of the smoothness of change of the atmospheric variables with altitude, the simplicity of analytic expression, and the computational precision necessary.



Figures II.3(b).—Ratio of approximate pressure to standard pressure for various altitudes.

Table II.3(a).—Derived polinomial coefficients for polynomials of various degrees

km]
ength,
°K; 1
temperature,
Units:

	_		· ·	Degree of 1	Degree of polynomial n			ــب
				1 20 20 482	(
,,, , , , , , , , , , , , , , , , , ,		Ď	9	7	∞	6	10	
_	ક	2.158247286×10°	3.475660693×10	3.048459828×10	2.824793081×10*	3.023172383×104	$2.837492391 \times 10^{2}$	
	ğ	2.411481452	-2.525420010×10	-1.329257586×10	-5.240572992	-1.416764159×10	-3.955242007	
	E.	2.074750035×10 ⁻³	1,385358828	$5.779491911 \times 10^{-1}$	$-1.266010595 \times 10^{-1}$	$8.553764861 \times 10^{-1}$	$-5.232974573 \times 10^{-1}$	
_	G,	$-1.862934731 \times 10^{-3}$	$-2.952861629 \times 10^{-2}$	$-7.100570823 \times 10^{-3}$	1.873293836×10-1	$-2.709268043 \times 10^{-3}$	5.256403630×10-1	
	3	2.292350448×10 ⁻⁶	2.822892690×10→	$-2.609635606 \times 10^{-5}$	$-5.104746533 \times 10^{-4}$	$6.065248048 \times 10^{-4}$	$-1.832962145 \times 10^{-1}$	•
_	ŝ	$-6.651502204 \times 10^{-8}$	$-1.207724386 \times 10^{-6}$	1.012652115×10-	6.050186406×10-	-9.587806007×10-6	3.432295909×10-	
_	ਵੱ		1.902015607×10-*	$-6.116010646 \times 10^{-9}$	-3.550162735×10-8	9.481497610×10 ⁻⁸	$-3.930824139 \times 10^{-7}$	<u></u>
	ğ			$1.145432322 \times 10^{-11}$	1.014102927×10 ⁻¹⁰	$-5.368751119\times10^{-10}$	2.848535349×10-	
	gg.				$-1.124449619\times10^{-13}$	$1.583000644 \times 10^{-12}$	$-1.269919974 \times 10^{-11}$	
	ક					$-1.883828451 \times 10^{-18}$	$3.161762924 \times 10^{-14}$	
	Ø10						$-3.350145769 \times 10^{-17}$	
				_				-

 $5.0784709 \times 10^{-4}Z - 0.083577870 - 6.7777209 \times 10^{-5}Z - 0.016141673$

 $(Z^2-193.32352Z+10,180.367)$

 $(Z^3 - 384.32662Z + 38,131.516)$

Table II.3(b).—Expansion in partial practions and evaluation of the integral

 $(Z+6356.77)^{2}(Z+14.002385)(Z-216.23225)(Z^{2}-26.414270Z+694.10967)(Z^{3}-137.47450Z+10,533.544)(Z^{2}-193.3255Z+10,180.367)(Z^{3}-384.32662Z+38,131.516)(Z^{3}-384.32662Z+38,131.516)(Z^{3}-384.32662Z+38,131.516)(Z^{3}-384.32662Z+38,131.516)(Z^{3}-384.32662Z+38,131.516)(Z^{3}-384.32662Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.326Z+38,131.516)(Z^{3}-384.34)(Z^{3}-384.34)(Z^{3}-384.34)(Z^{3}-384.34)(Z^{3}-384.34)(Z^{3}-384.34)(Z^{3}-384.34)(Z^{3}-384.34)(Z^{3}-384.34)(Z^{3}-38$ $\frac{1.3949832 \times 10^{-4}}{(Z-284.01763)} \frac{2.6655127 \times 10^{-4}Z + 0.018031036}{(Z^{2}-284.01763)} \frac{3.2004620 \times 10^{-4}Z - 0.060803123}{(Z^{2}-189.52010Z+9665.2950)} \frac{1.1125784 \times 10^{-4}Z - 0.028429767}{(Z^{2}-420.11368Z+45,675.466)}$ $\frac{2.5653341\times10^{-11}}{(Z+6356.77)} + \frac{1.4655396\times10^{-7}}{(Z+6356.77)^{2}} + \frac{1.4116834\times10^{-4}}{(Z+6356.77)^{2}} + \frac{3.8282910\times10^{-5}}{(Z-216.23225)} + \frac{3.0169957\times10^{-3}Z+0.011236207}{(Z-216.23225)} + \frac{1.7103935\times10^{-7}Z-0.0079564316}{(Z-216.23225)} + \frac{3.0169957\times10^{-3}Z+0.011236207}{(Z-216.23225)} + \frac{1.7103935\times10^{-7}Z-0.0079564316}{(Z-216.23225)} + \frac{3.0169957\times10^{-3}Z+0.011236207}{(Z-216.23225)} +$ $= \overline{(Z+6356.77)^2(Z+21.680485)(Z-284.01768)(Z^2-29.895060Z+924.13600)(Z^2-189.52010Z+9665.2950)(Z^2-420.11368Z+45,675.466)}$ [Units: temperature, 'K; length, km; time, sec] $-1.1828508 \times 10^{22}$ $-3.5241442 \times 10^{18}$ For n=10, the expansion of $\frac{g}{T_M}$ in partial fractions yields For n=8, the expansion of $\frac{g}{T_M}$ in partial fractions yields $\frac{1.0902039 \times 10^{-7} + 1.7870260 \times 10^{-4}}{(Z + 6356.77)^3 + (Z + 21.680485)}$ <u>|</u>|*

 $+1.1637071\times10^{-4} [t_{an}^{-1} (0.038184967Z -3.6184094) -3.6184094) -5.5628920\times10^{-4} [log_* (Z^2 - 420.11368Z + 45,675.466)] +1.2844040\times10^{-4} [t_{an}^{-1} (0.025387008Z -5.3327146)] +1.2844040\times10^{-4} [t_{an}^{-1} (0.02538Z -5.3327146)$ $+1.3327563\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.13600)] +8.3168074\times10^{-4} [\log_{\pi}(0.037777365Z-0.56467830)] -1.6002310\times10^{-4} [\log_{\kappa}(Z^{*}-189.52010Z+9665.295)] +1.3327563\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.13600)] +8.3168074\times10^{-4} [\log_{\pi}(Z^{*}-29.895060Z+924.13600)] +1.327563\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.13600)] +1.327563\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.13600)] +1.327563\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.13600)] +1.327563\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.13600)] +1.327563\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.13600)] +1.32763\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.13600)] +1.32763\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.13600)] +1.32763\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.13600)] +1.32763\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.13600)] +1.32763\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.1360)] +1.32763\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.1360)] +1.32763\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.1360)] +1.32763\times10^{-4} [\log_{\kappa}(Z^{*}-29.895060Z+924.1360]) +1.32763\times10^{-4} [\log_{\kappa}(Z^{*}-29.8950Z+924.1360]) +1.32763\times10^{-4} [\log_{\kappa}(Z^{*}-29.8950Z+924.1360]) +1.327623\times10^{-4} [\log_{\kappa}(Z^{*}-29.8950Z+924.1360]) +1.327623\times10^{-4} [\log_{\kappa}(Z^{*}-29.8950Z+924.1360]) +1.327623\times10^{-4} [\log_{\kappa}(Z^{*}-29.8950Z+924.1360]) +1.327623\times10^{-4} [\log_{\kappa}(Z^{*}-29.8950Z+924.1360]) +1.327623\times10^{-4} [\log_{\kappa}(Z^{*}-29.8950Z+924.1360])$ $\begin{bmatrix} T \\ +1.7870260 \times 10^{-4} \\ \end{bmatrix} \log_s (Z + 21.680485) \\ B - 1.3949832 \times 10^{-5} \\ \end{bmatrix} \log_s (Z - 284.01768) \\ B \\ \end{bmatrix}$ $-1.0902039 \times 10^{-7}$ $\boxed{Z+6356.77}$ T g dZ

For n=10, the integration of $\frac{g}{T_{\nu}}$ yields

For n=8, the integration of $\frac{g}{T_{\rm w}}$ yields

 $+1.1921879\times10^{-3}\{tan^{-1}(0.034567717Z-3.3413764)\ckbolune -1.3888604\times10^{-5}\ckbolune -1.384.32662Z+38,131.516)\ckbolune -1.3812379\times10^{-3}\ckbolune -1.3888604\times10^{-5}\ckbolune -1.3888604\times10^{ +8.5519675\times10^{-5}[\log_{\bullet}(Z^{2}-137.47450Z+10,533.544)\ \mathbb{K}+4.9863416\times10^{-5}[\tan^{-1}(0.013120767Z-0.90188546)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.3235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.3235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.3235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.3235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.3235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.3235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.3235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.3235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.2235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.2235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.2235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.2235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.2235ZZ+10,180.367)\ \mathbb{K}-2.5392354\times10^{-4}[\log_{\bullet}(Z^{3}-193.223ZZ+10,180.367)\ \mathbb{K}-2.539232Z+10.223Z+10.223Z+10.223Z+10.223Z+10.222Z+10.22Z+$ $-3.8282910 \times 10^{-4} [\log_*(Z-216.23225) \c{k}+1.5084978 \times 10^{-4} [\log_*(Z^3-26.414270 \c{Z}+684.10967) \c{k}+6.7419880 \times 10^{-4} [\log_*(Z-216.23225) \c{k}+1.508494588 \c{Z}-0.58500460) \c{k}$ $7 + 2.5653341 \times 10^{-11} [\log_{\bullet} (Z + 6356.77) \% + 1.4116834 \times 10^{-4} [\log_{\bullet} (Z + 14.002385) \%$ $=-1.4655396\times10^{-7}$ $\left[\frac{Z+6356.77}{Z}\right]$ J. gdZ

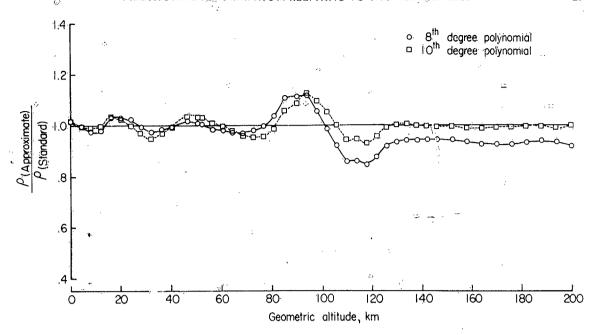


FIGURE II.3(c).—Ratio of approximate density to standard density for various altitudes.

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PART III

The Tables

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PART III

The Tables

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The main tables, contained in Part III of this document, have been computed by using the contants, conversion factors, and equations developed and discussed in Part I. Computation has been accomplished by heans of electronic digital com-	Table II	Acceleration due to gravity, specific weight, pressure scale height, num- ber density, particle speed, collision frequency, mean free path, and mo-	Page
outers with selected check points validated by com- outation on a different machine. The automatic	III	lecular weight. Metric units Sound speed, coefficient of viscosity, kinematic viscosity, and thermal	-61
print-out from the machines has been directly reproduced here by a photographic process. Thus,		conductivity. Metric units	87
very precaution possible has been taken to eliminate ooth computational errors and errors of transcription.	IV	Temperature, pressure, and density. English units	107
The tables are arranged in two principal categories: Atmospheric properties as a function of altitude, netric units	V	Acceleration due to gravity, specific weight, pressure scale height, num- ber density, particle speed, collision	
Atmospheric properties as a function of altitude,		frequency, mean free path, and mo- lecular weight. English units	149
English units t is to be emphasized that on left-hand pages entry s made in terms of geopotential altitude. On	VI	Sound speed, coefficient of viscosity, kinematic viscosity, and thermal conductivity. English units	191
ight-hand pages the same quantities appear in terms of geometric altitude. This arrangement is followed	VII	Geopotential altitude in meters as a function of pressure in millibars	225
o an altitude of 90 km. Above this altitude all entries are made in terms of geometric altitude only. A secondary category of the main tables presents	VIII	Geopotential altitude in meters as a function of pressure in millimeters of	
pressure as a function of altitude in various units. For added convenience, the contents of Part III	ΙX	Geopotential altitude in feet as a func-	241
are repeated here:		tion of pressure in millibars	255
Table Page I Temperature, pressure, and density.	X	Geopotential altitude in feet as a func- tion of pressure in inches of mer-	
Metric units		cury	271

Table I TEMPERATURE, PRESSURE, AND DENSITY Metric Units

Note: A one- or two-digit number (preceded by a plus or minus sign) following the initial entry of each block indicates the power of ten by which that entry and each succeeding entry of that block should be multiplied. A change of power occurring within a block is indicated by a similar notation.

TABLE I.
GEOPOTENTIAL ALTITUDE, METRIC UNITS

Altii	tude	T	emperatur	<u> </u>		Pressure		Den	sity
H, m	Z, m	т, °К	t,°C	T _M ,°K	P, mb	P, mm Hg	<u>P</u> P ₀	ρ, kg m ⁻³	<u>ρ</u> Ρο
-5000 -4950 -4900 -4850 -4800 -4750 -4750 -4600 -4550	-4996 -4946 -4896 -4896 -4796 -4796 -4796 -4697 -4697 -4597 -4597	320.650 320.325 320.000 319.675 319.350 319.025 318.700 318.375 318.050 317.725	47.500 47.175 46.850 46.525 46.520 45.875 45.550 45.25 44.900	320.650 320.325 320.000 319.675 319.350 319.025 318.700 318.375 318.375	1.77687 + 3 1.76743 1.75802 1.74866 1.73933 1.73005 1.72081 1.71160 1.70244 1.69332	1.33276 + 3 1.32568 1.31862 1.31860 1.30461 1.29764 1.29071 1.28381 1.27693 1.27009	1.75363 + 0 1.74831 1.73503 1.72579 1.71659 1.70743 1.69820 1.68922 1.68018	1.9305 + 0 1.9222 1.9139 1.9056 1.8974 1.8892 1.8810 1.8728 1.8647	1.5759 + 0 1.5623 1.5623 1.5556 1.5489 1.5122 1.5355 1.5289 1.5222 1.5156
-4500 -4450 -4400 -4350 -4300 -4250 -4200 -4150 -4100 -4050	-4497 -4447 -4397 -4397 -4297 -4247 -4197 -4147 -4097 -4047	317.400 317.075 316.750 316.425 316.100 315.775 315.425 315.425 314.4800 314.475	44.250 43.925 43.600 43.275 42.950 42.625 42.300 41.975 41.650 41.325	317.400 317.075 316.750 316.425 316.100 315.775 315.450 315.450 315.450	1.68423 + 3 1.67519 1.66618 1.65722 1.64829 1.63955 1.62174 1.61297	1.26328 + 3 1.25649 1.24974 1.24302 1.23632 1.22965 1.22302 1.21641 1.20983 1.20328	1.66221 + Q 1.65328 1.64439 1.63555 1.62674 1.61.796 1.60923 1.60054 1.59188 1.58326	1.8486 + 0 1.8405 1.8325 1.8245 1.8166 1.8086 1.4007 1.7928 1.7850 1.7771	1.5090 + 0 1.5025 1.4959 1.4894 1.4764 1.4764 1.4765 1.4635 1.4571
-4000 -3950 -3900 -3850 -3800 -3750 -3700 -3650 -3600 -3550	-3948 -3948 -3848 -3748 -3748 -3648 -3548 -3548	314.150 313.825 313.500 313.175 312.850 312.525 312.200 311.875 311.550 311.225	41.000 40.675 40.350 40.025 39.700 39.375 39.050 38.725 38.400 38.075	314.150 313.825 313.500 313.175 312.850 312.525 312.200 311.875 311.550 311.225	1.59554 + 3 1.58689 1.57827 1.56969 1.56115 1.555264 1.54417 1.53574 1.52735 7-51900	1-19676 + 3 1-19026 1-18380 1-17736 1-17096 1-16458 1-15823 1-15190 1-14561 1-13934	1.57468 + 0 1.56614 1.55763 1.54916 1.54073 1.53234 1.52398 1.51566 1.50738 1.49913	1.7693 + 0 1.7616 1.7538 1.7538 1.7461 1.7384 1.7307 1.7231 1.7154 1.7078	1.4444 + 0 1.4380 1.4317 1.4254 1.4191 1.4128 1.4066 1.4004 1.3942 1.3880
-3500 -3450 -3400 -3350 -3350 -3250 -3200 -3150 -3100 -3050	-348 -348 -3398 -3348 -3298 -3248 -3148 -3148 -3098 -3099	310.900 310.575 310.250 309.925 309.600 309.275 308.950 308.625 308.300 307.975	37.750 37.425 37.100 36.775 36.450 36.125 35.800 35.475 35.150 34.825	310.900 310.575 310.250 309.660 309.275 308.950 308.625 308.360 307.975	1.51068 + 3 1.50240 1.49415 1.48594 1.47777 1.46964 1.46154 1.45347 1.44545 1.43746	1.13310 + 3 1.12689 1.12071 1.11455 1.10842 1.10232 1.09624 1.09020 1.08417 1.07818	1.49092 + 0 1.48275 1.47461 1.46651 1.45845 1.45845 1.45842 1.43447 1.42655 1.41866	1.6927 + 0 1.6852 1.6777 1.6773 1.6628 1.6554 1.6800 1.6406 1.6333 1.6260	1.3818 + 0 1.3757 1.3696 1.3635 1.3578 1.35513 1.3853 1.3393 1.3393
-3000 -2950 -2900 -2850 -2850 -2750 -2760 -2650 -2600 -2550	-2999 -2949 -2899 -2849 -2799 -2749 -2699 -2649 -2599 -2549	307.450 307.325 307.000 306.475 706.350 306.025 305.700 305.375 305.050 304.725	34.500 34.175 33.850 33.525 33.200. 32.875 32.550 32.225 31.900 31.575	307.650 307.325 307.000 306.675 306.350 306.025 305.700 305.375 305.050	1.42950 + 3 1.42158 1.41370 1.40565 1.39804 1.39026 1.38252 1.37481 1.36714 1.35950	1.07221 + 3 1.06627 1.06636 1.05448 1.054861 1.04278 1.03697 1.03119 1.02544 1.01971	1.41081 + 0 1.40299 1.39521 1.38747 1.37976 1.37208 1.35683 1.34926 1.34172	1.6187 + 0 1.6114 1.6042 1.5970 1.5898 1.5826 1.5755 1.5684 1.5582	1.3214 + 0 1.3155 1.3095 1.3097 1.2978 1.2919 1.2861 1.2863 1.2745 1.2687
-2500 -2450 -2400 -2350 -2350 -2250 -2250 -2150 -2100* -2050	-2499 -2449 -2399 -2349 -2249 -2149 -2149 -2149 -2099	304.000 304.075 303.750 303.425 303.100 302.775 302.450 301.800 301.475	31.250 30.925 30.600 30.275 29.950 29.625 29.300 28.650 28.650	304.409 304.075 303.759 303.425 303.100 302.775 302.450 302.125 301.800 301.475	1.35190 + 3 1.34433 1.33679 1.32929 1.32183 1.31439 1.30699 1.29963 1.29230 1.28500	1.01401 + 3 1.00833 1.00268 9.97051 + 2 9.91451 9.85876 9.80327 9.74802 9.69304 9.63830	1.33422 + 0 1.32675 1.31931 1.31191 1.30454 1.29721 1.28990 1.28263 1.27540 1.26820	1.5472 + 0 1.5801 1.5332 1.5322 1.5192 1.5193 1.5054 1.4986 1.4917 1.4849	1.2630 + 0 1.2573 1.2516 1.2459 1.2402 1.2345 1.2289 1.2233 1.2177
-2000 -1950 -1900 -1850 -1800 -1750 -1760 -1650 -1650 -1550	-1999 -1949 -1899 -1849 -1799 -1750 -1700 -1650 -1650	301-150 300.825 300.500 300.175 299.850 299.525 299.200 298.875 298.550 298.225	28.000 27.675 27.350 27.025 26.700 26.375 26.050 25.725 25.400 25.075	301.150 300.825 300.500 300.175 299.850 299.525 299.200 298.875 298.550 298.225	1.27774 + 3. 1.27051 7.26331 1.25614 1.24901 1.24191 1.23485 1.22781 1.22081 1.21384	9.58382 + 2 9.52958 9.47559 9.42185 9.36836 9.31512 9.26212 9.20936 9.15685 9.10458	1.26103 + 0 1.25389 1.24679 1.23972 1.23268 1.22567 1.21870 1.21176 1.20485 1.19797	1.4781 + 0 1.4713 1.4645 1.4578 1.4511 1.4444 1.4378 1.4311 1.4275	1.2066 + 0 1.2011 1.1955 1.1901 1.1846 1.1791 1.1737 1.1683 1.1629 1.1575
-1500 -1450 -1400 -1350 -1300 -1250 -1200 -1150 -1100 -1050	-1500 -1450 -1400 -1350 -1350 -1250 -1200 -1150 -1100	297.900 297.575 297.250 296.925 296.400 296.275 295.950 295.950 295.300 294.975	24.750 24.425 24.100 23.775 23.450 23.125 22.800 22.475 22.150 21.825	297.900 297.575 297.250 296.925 296.600 296.275 295.950 295.625 295.300 294.975	1.20691 + 3 1.20000 1.19313 1.18629 1.17948 1.17270 1.16596 1.15256 1.15256	9.05255 + 2 9.00076 8.94921 8.89791 8.84684 8.79601 8.74541 8.67505 8.64493 8.59504	1.19112 + 0 1.18431 1.17753 1.17078 1.16406 1.15737 1.15071 1.14409 1.13749 1.13093	1.4114 + 0 1.4048 1.3983 1.3918 1.3853 1.3725 1.3725 1.3557 1.3533	1-1521 + 0 1-1468 1-1415 1-1362 1-1309 1-1256 1-1204 1-1152 1-1099 1-1048

TABL I ...
GEOMETRIC ALTITUDE, METRIC UNITS

	Altitude	Т	emperatur	e. ,	÷	Pressure	10 Towns (1)	De'n	sity
Z, 1	m H, m	т, °к	t,°C	T _M ,°K	P, mb	P, mm Hg	<u>Р</u> Р.	ρ, kg, m ⁻³ ,	$\frac{\rho}{\rho_{\rm o}}$
-50 -49 -49 -48 -48 -47 -46 -46	50 -4954 -4904 -4804 -4804 -4754 -4754 -4753 -4653	320.676 320.350 320.025 319.699 319.374 319.048 318.723 318.397 318.072 317.746	47.526 47.200 46.875 46.549 46.224 45.898 45.573 45.247 44.922 44.596	320.676 320.350 320.025 319.699 319.374 319.048 318.723 318.397 318.072 317.746	1.77762 + 3 1.76815 1.75873 1.74935 1.74901 1.773071 1.72145 1.771223 1.70305 1.69391	1.33332 + 3 1.32622 1.31916 1.31212 2.30511 1.29814 1.29119 1.28428 1.27739 1.27054	1.75437 + 0 1.74503 1.73573 1.72647 1.71725 1.70208 1.669894 1.66984 1.66984 1.67176	1.9311 + 0 1.9228 1.9145 1.9062 1.8980 1.8898 1.8816 1.8734 1.8653	1.5764 + 0 1.5696 1.5629 1.5561 1.5494 1.5427 1.5360 1.5293 1.5227
- 43 - 43 - 43 - 42 - 42 - 41 - 41	50 -4453 00 -4403 50 -4303 -4303 -4203 -4203 -4103	517.421 317.095 316.770 316.444 316.119 315.793 315.468 315.143 314.817 314.492	44.271 43.945 43.620 43.294 42.643 42.318 41.667 41.342	317.421 317.095 316.770 316.444 316.419 315.793 315.483 314.817 314.492	1.68481 + 3: 1.67575 1.66673 1.65775 1.64881 1.63991 1.63104 1.62222 1.61344 1.60469	1.26371 + 3 1.25692 1.25015 1.24342 1.23671 1.23671 1.23003 1.22338 1.21677 1.21018	1.66278 + 0 1.65384 1.64494 1.63607 1.62725 1.61846 1.60972 1.60101 1.59234 1.58371	1.8491 + 0 1.8410 1.8330 1.8350 1.8170 1.8091 1.8011 1.7933 1.7854	1.50?4 + 0 1.502? 1.4963 1.4998 1.4833 1.4708 1.4703 1.4639 1.4639 1.4575
-40 -39 -38 -38 -37 -36 -36 -35	50 -3952 00 -3902 50 -3852 00 -3852 00 -3752 00 -3702 -3702 -3652 00 -3602	314.166 313.841 313.516 313.190 312.865 312.539 312.214 311.889 311.563 311.238	41.016 40.691 40.366 40.040 39.715 39.389 39.064 38.739 38.413	314.166 313.841 313.516 313.190 312.539 312.539 312.214 311.889 311.563	1.59598 + 3 1.58731 1.57868 1.57809: 1.56153 1.55302 1.55454 1.53610 1.52769	1.19708 + 3 1.19058 1.18411 1.17766 1.17125 1.16486 1.15850 1.15217 1.14586 1.13959	1.57511 + 0 1.56656 1.55804 1.55804 1.54956 1.54111 1.53271 1.52434 1.51601 1.50772	1.7697 + 0 1.7619 1.7542 1.7464 1.7387 1.7311 1.7234 1.7158 1.7082	1.4487 + 0 1.4383 1.4320 1.4227 7.4194 1.4131 1.4069 1.4006 1.3984 1.3882
-35(-34) -34(-33) -32(-32(-31) -31(-30)	50	310.913 310.587 310.262 309.936 309.611 309.286 308.960 308.635 308.310	37.763 37.437 37.112 36.796 36.461 36.136 35.810 35.485 35.160 34.835	310.913 310.587 310.262 309.936 309.286 308.960 308.635 308.310 307.985	1.51100 + 3 1.50271 1.49445 1.48623 1.47805 1.46991 1.46180 1.45373 1.44569 1.43769	1.13334 + 3 1.12712 1.12093 1.11477 1.10863 1.10252 1.09038 1.09038	1.49.124 + 0 1.48.305 1.47.491 1.46.680 1.45.682 1.45.068 1.44.268 1.44.268 1.42.679 1.41.889	1.6930 + 0 1.6855 1.6780 1.6705 1.6631 1.66556 1.6482 1.6409 1.6335	1.3821 + 0 1.3759 1.3698 1.3637 1.3576 1.3515 1.3455 1.3395 1.3395
-30 -29 -29 -28 -28 -27 -27 -27 -26	50	307.659 307.334 307.009 306.683 306.358 306.033 305.707 305.382 305.057 304.732	34.509 34.184 33.859 33.533 33.208 32.883 32.557 31.907 31.582	307.659 307.334 307.009 306.683 306.358 306.707 305.382 305.707	1-42973 + 3 1-42180 1-41391 1-40605 1-39823 1-39085 1-38270 1-37498 1-36730 1-35966	1.07238 + 3 1.06644 1.06052 1.05463 1.04876 1.04292 1.03711 1.03132 1.02556 1.01983	1.41103 + 0 1.40321 1.39542 1.38766 1.37995 1.37226 1.36461 1.35700 1.34942 1.34188	1.6189 + 0 1.6116 1.6044 1.5972 1.5900 1.5828 1.5756 1.5685 1.5685	1.3216 + 0 1.3156 1.3097 1.3098 1.2979 1.2921 1.2862 1.2804 1.2746 1.2689
-25 -24 -24 -23 -23 -22 -22 -21 -21 -20	50	304.406 304.081 303.756 303.431 303.105 302.780 302.455 302.130 301.805 301.479	31.256 30.931 30.606 30.281 29.630 29.630 29.305 28.980 28.655 28.329	304.406 304.081 303.756 303.431 303.105 302.780 302.455 302.350 301.805	1.35205 + 3 1.35447 1.33693 1.32942 1.52195 1.31451 1.30711 1.29974 1.29240 1.28510	1.01412 + 3 1.00844 1.00278 9.97148 + 2 9.91544 9.85964 9.80411 9.74883 9.69380 9.63902	1.33436 + 0 1.32689 1.31945 1.31945 1.31204 1.30466 1.29732 1.29001 1.28274 1.27550 1.26829	1.5473 + 0 1.5403 1.5333 1.5223 1.5194 1.5124 1.5055 1.4987 1.4987 1.48850	1.2631 + 0 1.2574 1.2517 1.2460 1.2403 1.2346 1.2290 1.2234 1.2178
-20 -19 -19 -18 -18 -17 -17 -16 -16	50 -1951 00 -1901 50 -1851 00 -1801 -1750 00 -1700 -1650 00 -1600	301.154 300.829 300.504 300.178 299.853 299.528 299.203 298.878 298.553 298.227	28.004 27.679 27.354 27.028 26.703 26.378 26.053 25.728 25.403	301.154 300.829 300.504 300.178 299.528 299.528 299.203 298.878 298.553 298.227	1.27783 + 3 1.27059 1.26339 1.25622 1.24908 P.24198 1.23491 1.22787 1.22087	9.58450 + 2 9.53023 9.47621 9.42243 9.36891 9.31563 9.26260 9.20981 9.15727 9.10497	1.26112 + 0 1.25398 1.24687 1.23979 1.23275 1.22574 1.21876 1.21182 1.20490 1.19802	1.4782 + 0 1.4714 1.4646 1.4579 1.4512 1.445 1.4378 1.4378 1.4318	1.2067 + 0 1.2011 1.1956 1.1901 1.1846 1.1792 1.1737 1.1683 1.1629 1.1575
15: 14: 14: 13: 13: 12: 11: 11: 10:	50	297.902 297.577 297.252 296.927 296.602 296.277 295.626 295.301 294.976	24.752 24.427 24.102 23.777 23.452 23.127 22.801 22.476 22.151 21.826	297.902 297.577 297.252 296.927 296.602 296.277 295.951 295.626 295.301 294.976	1.20696 + 3 1.20005 1.19317 1.18633 1.17952 1.17274 1.16599 1.15927 1.15259 1.14593	9.05291 + 2 9.00110 8.94953 8.89820 8.84711 8.79626 8.74564 8.69526 8.64512 8.59521	1.19117 + 0 1.18436 1.17757 1.17082 1.16409 1.15740 1.15074 1.14411 1.13752 1.13095	1.4114 + 0 1.4049 1.3984 1.3919 1.3654 1.3789 1.3725 1.3661 1.3597	1.1522 + 0 1.1468 1.1415 1.1362 1.1309 1.1257 1.1204 1.1152 1.1100

TABLE I.—Continued
GEOPOTENTIAL ALTITUDE, METRIC UNITS

Alti	tude	1	remperatur			Pressure	·	Den	sity
H, m	Z, m	т,•к	1,°€	T _M ,°K	P, mb	P, mm Hg	<u>Р</u> Р _о	ρ, kg m ⁻³	<u> </u>
-1000 -950 -950 -850 -850 -750 -650 -600 -550	-1000 -950 -950 -850 -800 -750 -700 -450 -450	294.630 294.325 294.000 293.475 293.025 293.705 292.350 292.350 291.725	21.500 21.173 20.850 20.525 20.200 19.875 19.550 19.225 18.575	294.650 294.325 294.000 293.675 293.025 292.700 292.375 292.050 291.725	1.13929 + 3 1.13270 1.12614 1.11962 1.11312 1.10665 1.10022 1.09381 1.08744 1.08109	8.54538 + 2 8.49596 8.44677 8.39781 8.34908 8.30057 8.25230 8.20425 8.15644 8.10884	1.12439 + 0 1.11789 1.11142 1.10497 1.09856 1.09218 1.08583 1.07951 1.07951 1.07322	1.3470 + 0 1.3407 1.3344 1.3281 1.3219 1.3157 1.3095 1.3033 1.2971 1.2910	1.0996 + 0 1.0984 1.0893 1.0842 1.0791 1.0740 1.0690 1.0639 1.0589
-500 -450 -400 -350 -300 -250 -200 -150 -100	-500 -450 -400 -350 -350 -250 -250 -150 -100	271.400. 271.075 270.750 270.750 270.775 270.775 287.450 287.450 288.475	18.250 17.925 17.400 17.275 14.950 14.300 15.975 15.450 15.325	291.400 291.075 290.750 290.425 290.100 289.775 289.450 289.125 266.800 288.475	1.07477 + 3 1.06849 1.06223 1.05601 1.04981 1.04365 1.03751 1.03140 1.02532 1.01927	8.06147 + 2 8.01433 7.96741 7.92071 7.87424 7.82798 7.78195 7.73613 7.69054 7.64516	1.0 6072 + 0 1.0 5452 1.0 4834 1.0 4220 1.0 3608 1.0 3000 1.0 2394 1.0 1.791 1.0 1191 1.0 0594	1.2849 + 0 1.2788 1.2727 1.2667 1.2607 1.2547 1.2487 1.2427 1.2368 1.2309	1.0489 + 0 1.0439 1.0390 1.0340 1.0291 1.0242 1.0193 1.0145 1.0096
50 100 150 200 250 300 350 400	50 100 150 250 250 350 450	200.150 207.025 207.500 207.175 206.050 206.525 206.200 205.075 205.255 205.255	14.675 14.350 14.025 13.700 13.705 13.050 12.725 12.075	288.150 287.825 287.500 287.175 286.850 286.525 286.200 285.875 285.255	1.01325 + 3 1.00726 1.00129 9.95359 + 2 9.89453 9.83575 9.77725 9.71904 9.66311 9.60345	7.60000 + 2 7.55505 7.51032 7.46581 7.42151 7.37742 7.33754 7.28988 7.24643 7.20318	1.00000 + 9 9.94086 - 1 9.88200 9.82343 9.76514 9.70713 9.64940 9.559195 9.53477 9.47787	1.2250 + 0 1.2191 1.2133 3.2075 1.2017 1.1959 1.1901 1.1844 1.1786	1.0000 + 0 9.9521 - 1 9.9044 9.8568 9.8094 9.7622 9.7151 9.6683 9.6216 9.5751
500 550 600 650 700 750 800 850 900 950	500 550 400 450 700 750 850 850 950	284.900 284.575 284.250 283.925 283.600 283.275 282.950 282.625 282.300 281.975	11.750 11.425 11.100 10.775 10.125 9.800 9.475 9.150	284.575 284.575 284.250 283.925 283.275 282.650 282.650 282.650 282.300 281.975	9.5%608 + 2 9.48898 9.43216 9.37562 9.31935 9.26336 9.20763 9.15218 9.09700 9.0%209	7-16015 + 2 7-11732 7-07470 7-03229 6-99009 6-94809 6-90629 6-86470 6-82331 6-78213	9.42125 - 1 9.36490 9.30882 9.25302 9.19749 9.14222 9.08723 9.03250 8.97805 8.92385	1.1673 + 0 1.1616 1.1504 1.1504 1.1448 1.1392 1.1336 1.1281 1.1226	9.5287 - 1 9.4826 9.4365 9.3907 9.3451 9.2996 9.2542 9.2091 9.1641 9.1193
1000 1050 1100 1750 1200 1250 1350 1350 1400	1000 1100 1100 1150 1200 1250 1350 1400 1450	281.450 281.325 281.600 280.475 280.350 280.025 277.700 277.375 279.050 278.725	8.500 8.175 7.850 7.525 7.200 4.875 6.550 6.225 5.900	281.650 281.325 281.000 280.675 280.350 280.025 279.700 279.375 279.050 278.725	8.98745 + 2 8.93308 8.87897 8.82513 8.77155 8.71824 8.66519 8.61240 8.55987	6.74114 + 2 6.70036 6.65978 6.61939 6.57921 6.53922 6.49943 6.45983 6.42043 6.38123	8.86993 - 1 8.81626 8.76286 8.76286 8.65685 8.65685 8.60423 8.55188 8.49978 8.44794 8.39635	1.1116 + 0 1.1062 1.1008 1.0954 1.0900 1.0846 1.0743 1.0739 1.0686	9.0746 - 1 9.0302 8.9858 8.9417 8.8977 8.8539 8.8102 8.7668 8.7234 8.6803
1500: 1550 1600 1650 1700 1750 1800 1850 1900	1500 1550 1600 1650 1750 1801 1851 1901	274.400 278.075 277.455 277.425 277.100 274.475 274.450 274.800 275.475	5.250 4.925 4.400 4.275 3.950 3.425 3.300 2.975 2.450 2.325	278.400 278.075 277.750 277.425 277.100 276.775 276.125 275.800 275.475	8.45560 + 2 8.40384 8.35235 8.30111 8.25013 8.19939 8.14892 8.09869 8.04872 7.99899	6.34222 + 2 6.30340 6.26478 6.22634 6.18810 6.15005 6.11219 6.07452 6.03703 5.99974	8.34502 - 1 8.29305 8.24313 8.19256 8.14224 8.09217 8.04236 7.99279 7.94347 7.89439	1.0581 + 0 1.0528 1.0476 1.0424 1.0372 1.0320 1.0269 1.0218 1.0166 1.0116	8.6373 - 1 8.5945 8.5518 8.5093 8.4669 8.4248 8.3027 8.3409 8.2992 8.2576
2000 2050 2100 2150 2290 2250 2350 2350 2400 2450	2001 2051 2101 2151 2251 2251 2301 2351 2401 2451	275.150 274.825 274.500 274.175 273.850 273.525 273.200 272.875 272.550 272.25	2.000 1.475 1.350 1.025 0.700 0.375 0.050 -0.275 -0.600 -0.925	275.150 274.825 274.500 274.175 273.850 273.525 273.200 272.875 272.550 272.225	7.94952 + 2 7.90029 7.85131 7.80257 7.75409 7.70584 7.65784 7.61008 7.56256 7.51529	5.96263 + 2 5.92570 5.88897 5.85241 5.81604 5.77986 5.74385 5.70803 5.67239 5.63693	7.84556 - 1 7.79698 7.74864 7.74864 7.70054 7.65269 7.50507 7.55770 7.51057 7.46367 7.41701	1.0065 + 0 1.0014 9.9641 - 1 9.9140 9.8641 9.8143 9.7648 9.7155 9.6663 9.6174	8.2162 - 1 8.1750 8.1340 8.0930 8.09523 8.0117 7.9713 7.9310 7.8909 7.8509
2500 2550 2600 2650 2700 2750 2800 2850 2900 2950	2501 2551 2601 2651 2701 2751 2801 2851 2901 2951	271.900 271.575 271.250 270.925 270.600 270.275 269.950 269.625 269.300 268.975	-1.250 -1.575 -1.900 -2.225 -2.550 -2.875 -3.200 -3.525 -3.850 -4.175	271.900 271.575 271.250 270.925 270.600 270.275 269.950 269.300 268.975	7.46825 + 2 7.42145 7.37489 7.32856 7.28248 7.23662 7.19100 7.14562 7.10046 7.05554	5.60165 + 2 5.56655 5.53162 5.49688 5.46231 5.42791 5.39370 5.35965 5.32579 5.29209	7.37059 - 1 7.32440 7.27845 7.27845 7.23273 7.18725 7.14199 7.09697 7.05218 7.00761 6.96328	9.5686 - 1 9.5200 9.4716 9.4234 9.3754 9.3276 9.2799 9.2325 9.1852 9.1381	7.8111 - 1 7.7714 7.7319 7.6926 7.6534 7.6143 7.5754 7.5367 7.4981 7.4597

TABLE I — Continued

GEOMETRIC ALTITUDE, METRIC UNITS

Alti	tude	نۇسىم 1	[emperatur	e		Pressure		Den	siry
Z, m	H, m	т, •к	t,°C	T _M ,°K	P, mb	P, mm Hg	<u>P</u> P _o	ρ, kg m 3	<u>ρ</u> Ρ _ο
-1000 -950 -900 -850 -800 -750 -700 -650 -600 -550	-1000 -950 -900 -850 -800 -750 -700 -650 -600 -550	294.651 294.326 294.001 293.676 293.026 293.026 292.700 292.375 292.050 291.725	21.501 21.176 20.851 20.520 20.201 19.876 19.550 19.225 18.900	294.65! 294.326 294.001 293.676 293.351 293.026 292.700 292.375 292.050 291.725	1-13931 4 3 1-13272 1-12616 1-11963 1-11313 1-10666 1-10023 1-09382 1-08744 1-08110	8.54554 + 2 3.49610 8.49689 8.39792 6.34917 8.30066 8.25237 8.20432 8.15649 8.10889	1.12441 + 0 1.11791 1.11143 1.10499 1.09858 1.09219 1.08584 1.07952 1.07322 1.06696	1.3470 + 0 1.3407 1.3344 1.3281 1.3219 1.3157 1.3095 1.3033 1.2971	1.09.96 + 0 1.09.45. 1.08.93 1.08.42 1.07.91 1.07.40 1.06.90 1.06.39 1.05.89
-500 -450 -400 -350 -300 -250 -250 -150 -100 -50	-500 -450 -400 -350 -300 -250 -200 -150 -100 -50	291.400 291.075 290.750 290.425 290.100 289.775 289.850 289.125 288.800 288.475	18.250 17.925 17.600 17.600 16.950 16.950 16.325 16.300 15.975 15.650	291.400 291.075 290.750 290.425 290.100 289.775 289.125 288.800 268.475	1.07478 + 3 1.04849 1.04244 1.05401 1.04961 1.04965 1.03365 1.03140 1.02532 1.01927	8.06151 + 2 8.01436 7.96743 7.92073 7.87425 7.82799 7.78195 7.73614 7.69054 7.64516	1.06073 + 0 1.05452 1.04835 1.04820 1.03609 1.03000 1.02394 1.01791 1.00199	1.2849 + 0 1.2788 1.2727 1.2667 1.2547 1.2547 1.2487 1.2427 1.2368 1.2309	1.0489 + 0 1.0439 % 0390 1.0340 1.0291 1.0292 1.0193 1.0145 1.0096
50 100 150	50 100 150	288.150 287.825 287.500 287.175	15.000 14.675 14.350 14.025	288.150 287.825 287.500 287.175	1.01325 + 3 1.00726 1.00129 9.95360 + 2	7.60000 + 2 7.55505 7.51032 7.46581	1.00000 + 0 9.94086 - 1 9.88201 9.82344	1.2250 + 0 1.2191 1.2133 1.2075	1.0000 + 0 9.9521 - 1 9.9044 9.8568
200 250 300 350 400 450	200 250 300 350 400 450	286.850 286.525 286.200 285.875 285.550 285.225	13.700 13.375 13.050 12.725 12.400 12.075	284.850 284.525 284.200 285.875 285.550 285.225	9.89454 9.83576 9.77727 9.71906 9.66114 9.60349	7.42151 7.37743 7.33356 7.28990 7.24645 7.20321	9.76515 9.70714 9.64942 9.59197 9.53480 9.47791	1.2017 1.1959 1.1901 1.1844 1.1786 1.1729	9.8094 9.7622 9.7152 9.6683 9.6216 9.5751
500 550 600 650 700 750 800 850 900	500 550 600 650 700 750 800 850 900 950	284.900 284.575 284.250 283.900 283.276 282.951 282.951 282.301 281.976	11.750 11.425 11.100 10.775 10.450 10.126 9.801 9.476 9.151 8.826	284.900 284.575 284.250 283.925 283.600 283.276 282.931 282.626 282.301 281.976	9.54612 + 2 9.48904 9.43223 9.37570 9.31944 9.26346 9.20775 9.15231 9.09714 9.04225	7.16018 + 2 7.11736 7.07475 7.03235 6.99015 6.94816 6.90638 6.86480 6.82342 6.78225	9.42129 - 1 9.36495 9.30889 9.25309 9.19757 9.14232 9.08734 9.03263 8.97818 8.92401	1.1673 + 0 1.1616 1.1560 1.1504 1.1488 1.1392 1.1337 1.1281 1.7226	9.5288 - 1 9.4826 9.4826 9.3908 9.3451 9.2996 9.2543 9.2092 9.1642 9.1194
1000 1050 1100 1150 1200 1250 1300 1350 1400	1000 1050 1100 1150 1200 1250 1300 1350 1400 1450	281.651 281.326 281.001 280.676 280.351 280.027 279.702 279.377 279.052 278.727	8.501 8.176 7.851 7.520 6.877 6.552 6.227 5.902 5.577	281.451 281.326 281.001 280.676 280.351 280.027 279.702 279.377 279.052 278.727	8.98762 + 2 8.93327 8.87918 8.82535 8.77180 8.71850 8.66547 8.66547 8.56020 8.56020	6.74127 + 2 6.70050 6.65993 6.61956 6.57939 6.53941 6.49964 6.42068 6.38149	8.87009 - 1 8.81645 8.76307 8.70995 8.65709 8.60449 8.55215 8.50008 8.44826 8.39669	1.1117 + 0 1.1062 1.1008 1.0954 1.0990 1.0846 1.0793 1.0740 1.0687	9.0748 - 1 9.0303 8.9860 8.9419 8.8979 8.8541 8.8105 8.7670 8.7237 8.6806
1500 1550 1600 1650 1700 1750 1800 1850 1900	1500 1550 1660 1650 1700 1750 1799 1849 1899	278.402 278.077 277.753 277.428 277.103 276.778 276.453 276.128 275.804 275.479	5.252 h.927 h.603 h.278 3.628 3.308 2.954 2.329	278.402 278.077 277.753 277.403 277.103 276.778 274.453 276.128 275.804 275.479	8.45596 + 2 8.40423 8.35276 6.30155 8.25059 8.14948 8.04923 8.04928 7.99958	6.34249 + 2 6.30369 6.26509 6.22667 6.18845 6.15042 6.11258 6.07492 6.03746 6.00018	8.34539 - 1 6.29433 8.24354 8.19299 8.19270 8.09265 8.04286 7.99332 7.94402 7.89498	1.0581 + 0 T.0529 1.0476 1.0424 1.0372 1.0321 1.0269 1.0218 1.0167	8.6376 - 1 8.5948 8.5521 8.5096 8.4673 8.4673 8.3813 8.3813 8.2996
2000 2050 2100 2150 2200 2250 2300 2350 2400 2450	1999 2049 2099 2149 2199 2249 2299 2349 2399 2449	275.154 274.829 274.505 274.180 273.855 273.530 273.205 272.881 272.556 272.231	2.004 1.679 1.355 1.035 0.705 0.380 0.055 -0.269 -0.594 -0.919	275.154 274.829 274.505 274.180 273.530 273.530 273.205 272.281 272.556 272.231	7.95014 + 2 7.90094 7.85199 7.80328 7.75482 7.70661 7.65863 7.61091 7.56342 7.51618	5.96309 + 2 5.92619 5.88947 5.85294 5.81659 5.78043 5.74445 5.70865 5.67303 5.63760	7.84618 - 1 7.79762 7.74931 7.70124 7.65341 7.60583 7.55849 7.51138 7.46452 7.41789	1.0066 + 0 1.0015 9.9648 - 1 9.9147 9.8648 9.8151 9.7656 9.7163 9.6672 9.6183	8.2168 - 1 8.1756 8.1345 8.0936 8.0529 8.0529 8.0124 7.9719 7.9317 7.8916 7.8517
2500 2550 2600 2650 2700 2750 2850 2850 2900 2950	2499 2549 2599 2649 2699 2749 2799 2849 2899	271.906 271.582 271.257 270.932 270.283 269.958 269.633 269.633 269.84	-1.244 -1.568 -1.893 -2.218 -2.867 -3.192 -3.5141 -4.166	271.906 271.582 271.257 270.932 270.607 270.283 269.958 269.633 269.633 269.8984	7.46917 + 2 7.42240 7.37588 7.32958 7.32958 7.28353 7.23771 7.19213 7.14677 7.10166 7.05677	5.60234 + 2 5.56726 5.53236 5.49764 5.46310 5.42873 5.39454 5.36052 5.32668 5.29301	7.37150 - 1 7.32534 7.27942 7.23374 7.18829 7.14307 7.09808 7.05332 7.05379 6.96449	9.5695 - 1 9.5210 9.4726 9.4725 9.3765 9.3267 9.2811 9.2337 9.1864 9.1394	7.8119 - 1 7.7722 7.7328 7.6934 7.6543 7.6153 7.5164 7.5377 7.4991 7.4607

TABLE I.—Continued
GEOPOTENTIAL ALTITUDE, METRIC UNITS

Alti	lude i	7	empëratur	e ·		Pressure		Den	sity
H, m	Z, m	т,°К	t,°C	T _M ,°K	P, mb	P, mm Hg	<u>Р</u> Р ₀	ρ, kg m ⁻³	<u>ρ</u> Ρ _ο
3000 3050 3100 3150 3200 3250 3350 3350 3450	300 1 305 1 3102 3152 3202 3252 3302 3352 3352 3402 3452	268.650 268.325 268.000 267.675 267.350 267.025 266.700 266.375 266.050 265.725	-4.500 -4.825 -5.150 -5.475 -5.800 -6.125 -6.450 -6.775 -7.100	268.050 268.325 268.000 267.675 267.350 267.025 266.700 266.375 266.050 265.725	7.01085 + 2 6.96639 6.92215 6.87815 6.83437 6.79083 6.74748 6.70438 6.66150 6.61884	5-25857 + 2 5-22522 5-19204 5-15903 5-12620 5-09353 5-06103 5-02870 4-9654 4-96454	6.91917 - 1 6.87529 6.83163 6.78820 6.74500 6.70201 6.65925 6.61671 6.57439 6.53229	9.0912 - 1 9.0445 8.9980 8.9516 8.9055 8.8595 8.8137 8.7681 8.7226 3.6774	7.4214 - 1 7.3853 7.3453 7.3074 7.2099 7.2322 7.1948 7.1576 7.1205 7.0836
3500 3550 3600 3650 3700 3750 3850 3850 3950	3502 3552 3602 3652 3702 3752 3802 3852 3902 3952	265.400 265.075 264.750 264.825 264.100 263.775 263.450 263.125 262.800 262.475	-7.750 -8.075 -8.400 -8.725 -9.050 -9.375 -9.700 -10.025 -10.350 -10.675	265.400 265.075 264.750 264.425 264.100 263.775 263.450 263.125 262.800 262.475	6.57640 + 2 6.53419 6.49219 6.45041 6.40865 6.36751 6.32638 6.28547 6.24477 6.20429	4.93271 + 2 4.90104 4.86954 4.83821 4.80703 4.77602 4.74518 4.71449 4.68396 4.65360	6.49040 - 1 6.44874 6.40729 6.36606 6.32504 6.28424 6.24265 6.20328 6.16311 6.12316	8.6323 - 1 8.5874 8.5427 8.4981 8.4538 8.4538 8.3656 8.3656 8.3217 8.22781	7.0468 - 1 7.0101 6.9736 6.9372 6.9010 6.8650 6.8290 6.7576 6.7576
4000 4050 4100 4150 4200 4250 4300 4350 4450	4003 4053 4103 4153 4203 4253 4353 4353 4403 4453	262.150 261.825 261.500 261.175 260.850 260.525 260.200 259.875 259.550 259.225	-11.000 -11.325 -11.650 -12.300 -12.625 -12.950 -13.600 -13.925	262.150 261.825 261.500 261.175 260.850 260.525 260.200 259.875 259.550 259.225	6.16402 + 2 6.12396 6.08411 6.08447 6.00505 5.96583 5.92681 5.88801 5.884943 5.81102	4-62339 + 2 4-59335 4-56346 4-53373 4-50416 4-4744 4-44548 4-41637 4-38742 4-35862	8.08341 ~ 1 6.04388 6.00455 5.96543 5.96543 5.92652 5.88781 5.81101 5.77292 5.73503	8.1913 - 1 8.1482 8.1052 8.0624 8.0198 7.9774 7.9351 7.8930 7.8511 7.8093	6.6868 - 1 6.65165 6.5816 6.5816 6.5121 6.4776 6.4433 6.4090 6.3750
#500 #550 #600 #650 #750 #750 #850 #900 #950	4503 4553 4603 4653 4703 4754 4804 4854 5904	258.900 258.575 258.250 257.925 257.400 257.275 256.925 256.425 256.300 255.975	-14.250 -14.575 -14.900 -15.225 -15.550 -15.875 -16.200 -16.525 -16.850 -17.175	258.900 258.575 258.250 257.925 257.600 257.275 256.950 256.625 256.300 255.975	5.77283 + 2 5.73484 5.69706 5.65948 5.62209 5.56491 5.54793 5.51115 5.47457 5.43818	4.32998: ± 2 4.30148 4.27314 4.21496 4.21692 4.18903 4.16129 4.13370 4.10426 4.07897	5.69734 - 1 5.65985 5.62256 5.58547 5.54858 5.51188 5.47538 5.43908 5.40298 5.36706	7.7677 - 1 7.7263 7.6851 7.6440 7.6631 7.5624 7.5218 7.4814 7.4411	6.3410 - 1 6.3072 6.2735 6.2400 6.2066 6.1734 6.1402 5.1072 6.0744 6.0417
5000 5050 5100 5150 5200 5250 5350 5350 5450	5004 5054 5104 5154 5204 5254 5355 5405 5455	255.650 255.325 255.000 254.675 254.350 254.025 253.700 253.375 253.750	-17.500 -17.825 -18.150 -18.475 -18.475 -19.125 -19.125 -19.775 -20.425	255.650 255.325 255.000 254.675 254.350 254.025 253.700 253.375 253.050 252.725	5.40199 + 2 5.36599 5.39019 5.29458 5.25916 5.22394 5.18891 5.15407 5.11941 5.08495	4.05182 + 2 4.02482 3.97797 3.97126 3.97470 3.91828 3.89200 3.86587 3.83988 3.81403	5.33135 - 1 5.29502 5.26049 5.22534 5.19039 5.15563 5.12105 5.08667 5.05247 5.01846	7.2612 - 1 7.3214 7.2818 7.2424 7.2032 7.1641 7.1251 7.0864 7.0478 7.0093	6.0091 - 1 5.9767 5.9444 5.9122 5.8801 5.8482 5.8164 5.7848 5.7533 5.7219
5550 5550 5650 5700 5750 5850 5850 5850 5850	5505 5555 5605 5655 5705 5755 5805 5805 5855 5905	252.400 252.075 251.750 251.425 251.400 250.775 250.450 250.125 249.800 249.875	-20.750 -21.075 -21.400 -21.725 -22.375 -22.375 -22.700 -23.025 -23.350 -23.675	252.400 252.075 251.750 251.425 251.100 250.775 250.450 250.125 249.800 249.475	5.05068 + 2 5.01659 4.98269 4.94897 4.91544 4.88209 4.84893 4.81595 4.78315 4.75053	3.78832 + 2 3.76275 3.73732 3.71203 5.68688 3.66187 3.63700 3.63700 3.58766 3.58766	4.98463 - 1 4.95099 4.91753 4.885116 4.81825 4.78552 4.775297 4.72060 4.68841	6.9711 - 1 6.9329 6.8950 6.8572 6.8175 6.7820 6.7447 6.7075 6.6705	5.6907 - T 5.6595 5.6285 5.5977 5.5670 5.5364 5.5059 5.4755 5.4453 5.4152
6000 6050 6100 6150 6200 6350 6350 6450 6450	6006 6056 6106 6156 6206 6256 6306 6356 6406 6457	249.150 248.825 248.500 248.175 247.525 247.525 247.200 246.875 246.550 246.225	-24.000 -24.325 -24.650 -24.975 -25.625 -25.625 -25.450 -26.600 -26.925	249.150 248.825 248.500 248.175 247.550 247.200 246.875 246.550 246.228	4.71810 + 2 4.68584 4.65376 4.62186 4.59014 4.55859 4.52722 4.49602 4.46500. 4.43415	3-53886 + 2 3-51467 3-46668 3-46668 3-4189 3-41922 3-39569 3-37230 3-34903 3-34903 3-32589	4.65640 - 1 4.62456 4.59291 4.56142 4.53011 4.49898 4.46802 4.43723 4.43723 4.437617	6.5970 1 6.5604 6.5240 6.4878, 6.4517 6.4158 6.3800 6.3444 6.3089 6.2736	5.3853 - 1 5.3554 5.3257 5.2962 5.2667 5.2374 5.2082 5.1791 5.1501 5.1213
6550 6550 6650 6750 6750 6850 6850 6950	6557 6557 6657 6757 6757 6857 6857 6958	245.575 245.250 244.275 244.275 244.275 243.955 243.975	-27.250 -27.575 -27.900 -28.225 -28.550 -29.875 -29.200 -29.525 -30.175	245.900 245.575 245.250 244.925 244.900 244.275 243.950 243.300 242.975	4.40348 + 2 4.37298 4.34264 4.31248 4.26249 4.25267 4.22302 4.19353 4.16421 4.13506	3.30288 + 2 3.28000 3.25725 3.23463 3.21213 3.18976 3.16752 3.14541 3.12341 3.10155	4.34590 - 1 4.31579 4.28586 4.25609 4.25609 4.19706 4.16779 4.13869 4.10976 4.08098	6.2384 - 1 6.2034 6.1686 6.1338 6.0949 6.0306 5.9965 5.9965 5.9625	5.0926 - 1 5.0640 5.0356 5.0072 4.9790 4.9509 4.9229 4.8674 4.8674

TABLE I.—Continued
GEOMETRIC ALTITUDE, METRIC UNITS

Altit	tude	7	emperatur	е.		Pressure		Den	sity
Z, m	H, m	T,°K	t,°C	T _M ,°K	P, mb	P, mm Hg	<u>P</u> P ₀	ρ, kg m ⁻³	$\frac{\rho}{\rho_0}$
3000 3050 3150 3150 3200 3250 3350 3350 3450	2999 3049 3098 3148 3198 3248 3298 3348 3348 3448	268.659 268.335 268.010 267.665 267.360 267.036 266.711 266.386 266.062 265.737	-4.491 -4.2815 -5.140 -5.465 -5.790 -6.114 -6.439 -6.764 -7.088	268.659 268.335 268.010 267.685 267.360 267.036 266.711 266.386 266.062 265.737	7.01211 + 2 6.96768 6.92349 6.87952 6.83577 5.79226 6.74897 6.70590 6.66305 6.62043	5.25952 + 2 5.22619 5.19304 5.16006 5.12725 5.09461 5.06214 5.02984 4.99770 4.96573	6.92042 - 1 6.87657 6.83295 6.78956 6.74638 6.70344 6.66073 6.61821 6.57592 6.53386	9.0925 - 1 9.0459 8.9994 8.9531 8.9069 8.8610 8.8152 8.7697 8.7243	7.4225 - 1 7.3844 7.3464 7.37086 7.2710 7.2335 7.1961 7.1589 7.1219 7.0849
3500 3550 3600 3650 3700 3750 3850 3850 3950	3498 3548 3598 3648 3648 3748 3748 3748 3748 3848 3848	265.413 265.088 264.763 264.439 264.114 263.789 263.465 263.140 262.816 262.491	-7.737 -9.062 -8.387 -8.711 -9.036 -9.361 -9.685 -10.010 -10.334 -10.659	265.413 265.088 264.439 264.439 264.114 263.789 263.465 263.140 262.816	6.57803 + 2 6.53586 6.49390 6.45216 6.41064 6.36933 6.32824 6.28737 6.24671 6.20627	4.93393 + 2 4.90229 4.87082 4.83952 4.80837 4.7737 4.7739 4.74657 4.71592 4.68542 4.65509	6.49201 - 1 6.45039 6.40898 6.36778 6.32681 6.28604 6.24549 6.20515 6.16503 6.12511	8.6340 - 1 8.5892 8.5945 8.5000 8.4557 8.4115 8.3676 8.3238 8.2802 8.2367	7.0482 - 1 7.0116 6.97.51: 6.9388 6.9026 6.8666 6.8307 6.7749 6.77593 6.7239
#000 #050 #100 #150 #250 #250 #350 #450	3997 4047 4097 4147 4197 4247 4297 4347 4397 4447	262.166 261.842 261.517 261.193 260.868 260.543 260.219 259.894 259.570	-10.984 -11.308 -11.633 -11.937 -12.282 -12.607 -12.631 -13.256 -13.580 -13.905	262.166 261.842 261.517 261.193 260.868 260.543 260.219 259.894 259.570 259.245	6.16004 + 2 6.12602 6.08621 6.04662 6.00723 5.96805 5.92908 5.89031 5.85175 5.81340	4.62491 + 2 4.59489 4.56504 4.53533 4.50579 4.47640 4.44717 4.41870 4.38918 4.36041	6.085+1 - 1 6.04591 6.00663 5.96755 5.92867 5.89001 5.85154 5.81329 5.77523 5.73738	8.1935 - 1 8.1504 8.1075 8.0647 8.0222 7.9798 7.9376 7.8955 7.8536	6.6885 - 1 6.6534 6.6183 6.5885 6.5487 6.5141 6.4796 6.4453 6.4111
4500 4600 4650 4750 4750 4850 4850 4850	4597 4597 4597 4697 47%6 47%6 4846 4896 4946	258.921 258.596 258.272 257.947 257.298 256.974 256.649 256.325 256.000	-14.229 -14.554 -14.878 -15.203 -15.527 -15.852 -16.176 -16.825 -17.150	258.921 258.596 258.272 257.247 257.623 237.298 256.974 256.649 256.325 256.000	, 5.77525 + 2 5.73731 5.69957 5.66202 5.62468 5.58755 5.55061 5.51386 5.47732 5.44097	4.33180 + 2 4.30333 4.27503 4.22687 4.21886 4.19100 4.16330 4.13574 4.10833 4.08107	5.69973 - 1 5.66228 5.62503 5.58798 5.55113 5.51448 5.47802 5.44176 5.40570 5.36982	7.7704 - 1 7.7290 7.6876 7.6468 7.6059 7.5652 7.5247 7.4844 7.4442	6.3432 - 1 6.3094 6.2758 6.2223 6.2089 6.1757 6.1426 6.1097 6.0769 6.0442
5000 5050 5100 5150 5200 5250 5350 5350 5450	4996 5046 5096 5146 5196 5246 5298 5346 5395 5445	255.676 255.351 255.027 254.702 254.378 254.053 253.729 253.404 253.080 252.755	-17.474 -17.799 -18.123 -18.472 -19.097 -19.421 -19.746 -20.070 -20.395	255.676 255.351 255.027 254.702 254.378 254.053 253.729 253.404 253.080 252.755	5.40182 + 2 5.36887 5.33311 5.29754 5.26217 5.26598 5.19199 5.15719 5.1258 5.08816	4.05395 + 2 4.02698 4.00016 3.97348 3.94695 3.92056 3.89432 3.86821 3.84825 3.81643	5.33415 - 1 5.29866 5.26337 5.22827 5.19335 5.15863 5.12410 5.08975 5.05560 5.02162	7.3643 - 1 7.3246 7.2851 7.2457 7.2065 7.1675 7.1286 7.0899 7.0513 7.0129	6.0117 - 1 5.9793 5.9470 5.9149 5.8829 5.8510 5.8192 5.7876 5.7562 5.7548
5500 5550 5600 5650 5700 5750 5850 5850 5950	5495 5545 5545 5645 5645 5745 5745 5785 5785 5845	252.431 252.106 251.782 251.458 251.133 250.809 250.484 250.160 249.836 249.511	-20.719 -21.044 -21.368, -21.692 -22.017 -22.341 -22.666 -22.990 -23.314 -23.639	252.431 252.106 251.782 251.433 250.809 250.484 250.160 249.836 249.511	5.05393 + 2 5.01988 4.98602 4.95235 4.91886 4.88555 4.05243 4.78673 4.75416	3.79076 + 2 3.76522 3.77822 3.71456 3.68945 3.66446 3.63962 3.61491 3.59034 3.56591	4-98784 - 1 4-95424 5-92082 4-88759 4-85453 4-82166 4-78898 4-75647 4-72414 4-69199	6.97%7 - 1 6.9366 6.8987 6.8610 6.823% 6.7259 6.7486 6.7115 6.67%6	5.6936 - 1 5.6625 5.6316 5.6008 5.5701 5.5395 5.5091 5.4788 5.4466 5.4186
6000 6050 6100 6150 6200 6250 6350 6400 6450	5994 6044 6094 6144 6194 6244 6244 6344 6394	249.187 248.862 248.538 248.214 247.889 247.565 247.241 246.916 246.592 246.267	-23.963 -24.288 -24.612 -24.936 -25.261 -25.585 -25.985 -26.234 -26.358 -26.882	249.187 248.862 248.538 248.214 247.889 247.565 247.241 246.591 246.592 246.267	4.72176 + 2 4.68954 4.65750 4.62564 4.59396 4.53112 4.49997 4.46899 4.43818	3.54161 + 2 3.51745 3.49342 3.46952 3.44576 3.42212 3.39862 3.37525 3.35202 3.32891	4.66001 - 1 4.62822 4.59660 4.56516 4.53389 4.50279 4.47187 4.44112 4.41055 4.38014	6.0011 - 1 6.5646 6.5283 6.4921 6.4561 6.4202 6.3845 6.3489 6.3135 6.2782	5.3887 - 1 5.3589 5.3292 5.2997 5.2703 5.2410 5.2118 5.1828 5.1539 5.1251
6500 6550 6600 6450 6750 6750 6800 6850 6900 6950	6493 6543 6593 6643 6693 6743 6793 6843 6893 6942	245.943 245.619 245.294 244.970 244.646 244.322 243.973 243.673 243.349 243.024	-27-207 -27-531 -27-855 -28-180 -28-504 -26-828 -29-153 -29-877 -29-801 -30-126	245.943 245.619 245.294 244.970 244.646 244.322 243.673 243.673 243.349 243.024	4.40754 + 2 4.37708 4.31667 4.31667 4.28671 4.25693 4.22732 4.19787 4.16859 4.13947	3.30593 + 2 3.28308 3.26036 3.23777 3.21530 3.19276 3.17075 3.14866 3.12670 3.10486	4.34991 ~ 1 4.31984 4.28995 4.26022 4.23066 4.20126 4.17204 4.11207 4.11408 4.08534	6.2431 - 1 6.2081 6.1733 6.1387 6.1041 6.0698 6.0356 6.0015 5.9676 5.9338	5.0964 1 5.0679 5.0394 5.0111 4.9830 4.92549 4.9270 4.8892 4.8715 4.8439

TABLE I.—Continued
GEOPOTENTIAL ALTHRUDE, METRIC UNITS:

		· · · · · · · ·	y	·		E, METRIC			••
Alt	itude	·	emperatur	e .	i	Pressure	·	Den	sity
H, m	Z, m	T, °K	t,°C	T _M ,°K	P, mb	P, mm Hg	<u>P</u> .	ρ, kg m ⁻³	$\frac{\rho}{\rho_o}$
7000 7050 7100 7150 7200 7250 7300 7350 7400 7450	7408 7058 7108 7158 7208 7258 7308 7359 7409 7459	242.650 242.325 242.000 241.675 241.350 241.025 240.700 240.375 240.050 239.725	-30.500 -30.525 -31.150 -31.475 -31.800 -32.125 -32.475 -32.775 -33.100 -33.425	242.650 242.325 242.000 241.675 241.350 241.025 240.700 240.375 240.050 239.725	4.10607 + 2 4.07725 4.04859 4.02009 3.99176 3.96359 3.93558 3.90773 3.88004 3.85251	3.07981 + 2 3.05819 3.03669 3.01532 2.99407 2.97294 2.95193 2.93104 2.91027 2.88962	4.05238 - 1 4.02393 3.99565 3.96752 3.93956 3.91176 3.88411 3.85663 3.82930 3.80213	5.8950 - 1 5.8615 5.8281 5.7949 5.7618 5.7288 5.6960 5.6634 5.6308 5.5985	4.8122 - 1 4.7849 4.7576 4.7305 4.7035 4.6766 4.6498 4.6231 4.5231 4.5702
7500 7550; 7600 7650 7700 7750 7800 7850 7900	7509 7559 7609 7659 7709 7759 7810 7860 7910	239.400 239.075 238.750 238.825 238.100 237.775 237.450 237.125 236.800 236.475	-33.750 -34.075 -34.400 -34.725 -35.050 -35.375 -35.700 -36.025 -36.675	239.400 239.075 238.750 238.425 238.100 237.775 237.450 237.125 236.800 236.475	3.82514 + 2 3.79792 3.797987 3.74396 3.71722 3.699063 3.66419 3.63791 3.61178 3.58580	2.86909 + 2 2.84868 2.82838 2.80820 2.78814 2.76820 2.74837 2.72866 2.70906 2.68957	3.77512 - 1 3.74826 3.72156 3.69501 3.66861 3.64831 3.61628 3.59034 3.56455 3.53891	5.5662 - 1 5.5341 5.5022 5.4704 5.4367 5.4072 5.3758 5.3446 5.3135 5.2825	4.5439 - 1 4.5177 4.4916 4.4656 4.4398 4.4140 4.3884 4.33629 4.3375 4.3122
8000 8050 8100 8150 8200 8250 8350 8400 8450	8010 8060 8110 8160 8211 8261 8311 8361 8411	236.150 235.825 235.500 235.175 234.525 234.525 234.525 233.875 233.550 233.225	-37.000 -37.325 -37.650 -37.975 -38.525 -38.950 -39.275 -39.600 -39.925	236.150 235.825 235.500 235.175 234.525 234.525 234.525 233.550 233.550 233.225	3.55998 + 2 3.53430 3.50878 3.48340 3.45817 3.43309 3.40816 3.38338 3.35874 3.33425	2.67020 + 2 2.65094 2.63180 2.61276 2.59384 2.57503 2.55633 2.53774 2.51926 2.50089	3.51342 - 1 3.48808 3.46289 3.43785 3.41295 3.36360 3.336360 3.33913 3.31482 3.29065	5.2517 - 1 5.2210 5.1904 5.1600 5.1297 5.0996 5.0696 5.0397 5.0100 4.9804	4.2871 - 1 4.2620 4.2371 4.2123 4.1875 4.1629 4.1384 4.1140 4.0898 4.0656
8500 8550 8600 8650 8750 8750 8850 8900	8511 8562 8612 8662 8712 8762 8812 8862 8912 8963	232.900 232.575 232.250 231.925 231.600 231.275 230.950 230.625 230.300 229.975	-40.250 -40.575 -40.900 -41.225 -41.550 -41.875 -42.200 -42.525 -42.850 -43.175	232.900 232.575 232.250 231.925 231.600 231.275 230.950 230.625 230.300 229.975	3.30990 + 2 3.28570 3.26164 3.23772 3.21394 3.19031 3.16682 3.14346 3.12025 3.09718	2.48263 + 2 1 2.46447 2.42849 2.42849 2.41066 2.39293 2.37531 2.35779 2.34038 2.32307	3.26662 - 1 3.24273 3.21898 3.17538 3.17191 3.14859 3.12540 3.10236 3.07945 3.05668	4.9509 1 4.9214 4.8633 4.8633 4.8355 4.7769 4.7763 4.7199	4.0415 - 1 4.0176 3.9938 3.9700 3.9464 3.9229 3.8995 3.8762 3.8530 3.8299
9000 9050 9100 9150 9200 9250 9300 9350 9400 9450	9013 9063 9113 9163 9213 9263 9314 9364 9414	229.650 229.325 229.000 228.675 228.350 228.025 227.700 227.375 227.050 226.725	-43.500 -43.825 -44.150 -44.800 -45.125 -45.450 -45.775 -45.700 -46.100	229.650 229.325 229.000 228.675 228.350 228.025 227.700 227.375 227.050 226.725	3.07424 + 2 3.05144 3.02878 3.00626 2.98387 2.96162 2.93950 2.91751 2.89566 2.87394	2.30587 + 2 2.28877 2.27177 2.25488 2.23809 2.22140 2.20481 2.18832 2.17193 2.15564	3.03404 - 1 3.01154 2.98918 2.96695 2.94485 2.92289 2.90106 2.87936 2.85780 2.83636	4.6635 - 1 4.6355 4.6076 4.5798 4.5522 4.55246 4.4973 4.4700 4.4429 4.4159	3.8069 - 1 3.7840 3.7613 3.7386 3.7160 3.67160 3.6712 3.6490 3.6268 3.6268
9500 9550 9690 9650 9700 9750 9800 9850 9900	9514 9564 9615 9665 9715 9765 9815 9865 9915	226.400 226.075 225.750 225.425 225.100 224.775 224.450 224.125 223.800 223.475	-46.750 -47.075 -47.400 -47.725 -48.050 -48.375 -48.700 -49.025 -49.350 -49.675	226.400 226.075 225.750 225.425 225.100 224.775 224.450 224.125 223.475	2.85236 + 2: 2.83090 2.80958 2.78638 2.76732 2.74638 2.72558 2.72558 2.70490 2.68435 2.66392	2.13944 + 2: 2.12335 2.10736 2.09146 2.07566 2.05996 2.04435 2.02884 2.01343 1.99811	2.81506 - 1 2.79388 2.77284 2.75192 2.75193 2.71047 2.68994 2.66953 2.64924 2.62909	4.3890 = 1 4.3623 4.3356 4.3356 4.3091 4.2827 4.2565 4.2304 4.1785 4.1527	3.5829 = 1. 3.5610 3.5393 3.5177 3.4961 3.4747 3.4534 3.4321 3.4110 3.3900
10000 10050 10100 10150 10200 10250 10350 10350 10450	10016 10066 10116 10166 10216 10267 10317 10367 10417	223.150 222.825 222.500 222.175 221.850 221.525 221.525 221.525 220.875 220.550 220.225	-50.000 -50.325 -50.650 -50.975 -51.300 -51.625 -51.927 -52.400 -52.400	223.150 222.825 222.500 222.175 221.850 221.525 221.525 221.525 221.525 221.525	2.64362 + 2 2.62345 2.60340 2.58348 2.56367 2.54400 2.52444 2.50501 2.48570 2.46650	1.98288 + 2 1.96775 1.95271 1.93777 1.92291 1.90815 1.89349 1.87891 1.86442 1.35003	2.60905 - 1 2.58914 2.56936 2.54969 2.53015 2.51073 2.49143 2.47225 2.45319 2.43425	4.1271 - 1 4.1015 4.0761 4.07509 4.0257 4.0257 4.0007 3.9757 3.9509 3.9263 3.9017	3.3690 - 1 3.3482 3.3275 3.2068 3.2063 3.2658 3.2658 3.2255 3.2253 3.2051 3.1851
10500 10550 10600 10650 10700 10750 10800 10850 10900	10517 10568 10618 10668 10718 1078 10818 10869 10919 10969	219.900 219.575 219.250 218.925 218.9600 218.275 217.950 217.625 217.300 216.975	-53.250 -53.575 -53.575 -54.225 -54.550 -54.875 -55.250 -55.850 -56.175	219.900 219.575 219.255 218.925 218.600 218.275 217.950 217.300 216.975	2.44743 + 2 2.42848 2.40965 2.37093 2.37234 2.35386 2.33550 2.31725 2.29912 2.28110	1.83573 + 2 1.82151 1.80738 1.77935 1.77940 1.76554 1.75177 1.73808 1.72448 1.71097	2.41543 - 1 2.39672 2.37614 2.35967 2.34131 2.32308 2.30496 2.28695 2.26905 2.25127	3.8772 - 1 3.8529 3.8287 3.8046 3.7568 3.7568 3.7330 3.7094 3.6859 3.6625	3.1651 - 1 3.1452 3.1255 3.1058 3.0862 3.0668 3.0474 3.0281 3.0089- 2.9878

TABLE I.—Continued
GEOMETRIC ALTITUDE, METRIC UNITS

Alti	tude	7	emperatur	e		Pressure	•	Den	sity
Z, m	H, m	T,°K	t,°C	T _M ,°K	P, mb	P, mm Hg	<u>Р</u> Р ₀	ρ, kg m ⁻³	$\frac{\rho}{\rho_{o}}$
7090 7050 7100 7150 7200 7250 7300 7350 7400 7450	6992 7042 7092 7142 7192 7242 7292 7342 7391 7441	242.700 242.376 242.051 241.727 241.403 241.079 240.754 240.430 240.106 239.782	-30.450 -30.774 -31.099 -31.423 -31.747 -32.071 -32.370 -33.784 -33.368	242.700 242.376 242.051 241.727 241.403 241.079 240.754 240.430 240.106 239.782	4.11052 + 2 4.08174 4.05312 4.02466 3.96823 3.96823 3.94026 3.91245 3.88479 3.88479	3.08315 + 2 3.06156 3.04009 3.01874 2.99752 2.97642 2.97544 2.93458 2.91384 2.89321	4.05677 - 1 4.02836 4.00012 3.97203 3.94411 3.91634 3.88873 3.86128 3.83399 3.80686	5.9002 - 1 5.8667 5.8334 5.8002 5.7671 5.7342 5.7015 5.6689 5.6364	4-8165 - 1 4-7891 4-7619 4-7348 4-7079 4-6810 4-6543 4-6277 4-6012 4-5748
7500 7550 7600 7650 7700 7750 7800 7850 7900 7950	7491 7541 7591 7641 7691 7741 7740 7840 7890 7940	239.457 239.133 238.809 238.485 238.161 237.836 237.512 237.188 236.864 236.540	-33.693 -34.017 -34.341 -34.989 -35.318 -35.638 -35.962 -36.286 -36.610	239.457 239.133 238.809 238.461 237.836 237.512 237.186 236.864 236.540	3-82996 + 2 3-80279 3-77577 3-74890 3-72219 3-69564 3-66924 3-64299 3-61689 3-59095	2.87271 + 2 2.85232 2.83206 2.81191 2.79187 2.77196 2.75215 2.73247 2.71289 2.69343	3.77988 - 1 3.75306 3.72639 3.69988 3.67352 3.67352 3.64731 3.62125 3.59535 3.59535 3.5960	5.5719 - 1 5.5399 5.5080 5.4762 5.4446 5.4131 5.3818 5.3506 5.3196 5.2086	4.5485 - 1 4.5224 4.4963 4.4704 4.4466 4.4189 4.3933 4.3678 4.3173
8000 8050 8100 8150 8200 8250 8350 8400 8450	7990 8040 8090 8140 8189 8289 8289 8389 8389 8439	236.215 235.891 235.567 235.243 234.919 234.595 234.270 233.622 233.622	-36.935 -37.259 -37.583 -37.907 -38.231 -38.555 -36.860 -39.204 -39.528 -39.852	236.215 235.891 235.567 235.243 234.595 234.595 234.595 233.946 233.622 233.298	3.56516 + 2 3.53952 3.51403 3.48868 3.46389 3.43885 3.41355 3.36419 3.336419 3.33973	2.67409 + 2 2.65486 2.63574 2.61673 2.59783 2.57905 2.56037 2.54181 2.52335 2.50500	3.51854 - 1 3.49323 3.46807 3.44306 3.41820 3.39348 3.36891 3.34448 3.32020 3.29606	5.2579 - 1 5.2272 5.1967 5.1663 5.1361 5.1060 5.0761 5.0462 5.0165 4.9870	4.2921 - 1 4.2671 4.2422 4.2174 4.1927 4.1937 4.1194 4.0051 4.0710
8500 8550 8600 8650 8700 8750 8850 8850 8950	8489 8539 8588 8638 8688 8738 8788 8788 8788	232.974 232.650 232.326 232.001 231.677 231.353 231.029 230.705 230.381 230.057	-40.176 -40.500 -40.824 -41.149 -41.473 -41.797 -42.121 -42.445 -42.769 -43.093	232.974 232.650 232.326 232.001 231.677 231.353 231.029 236.705 230.381 230.057	3.31541 + 2 3.29124 3.26721 3.24333 3.21958 3.19598 3.17252 3.14920 3.12602 3.10297	2.48677 + 2 2.46864 2.45061 2.43270 2.41489 2.37959 2.36209 2.36209 2.34470 2.32742	3.27206 - 1 3.24820 3.22449 3.20092 3.17748 3.15419 3.13103 3.10802 3.08514 3.06239	4.9576 - 1 4.9283 4.8991 4.8701 4.8412 4.8125 4.7838 4.7553 4.7270 4.6987	4.0470 - 1 4.0231 3.9993 3.9756 3.9756 3.9285 3.9052 3.8819 3.88588 3.8357
9000 9050 9100 9150 9200 9250 9350 9400 9450	8987 9037 9087 9137 9187 9237 9286 9336 9336	229.733 229.409 229.085 228.436 228.112 227.788 227.464 227.140 226.816	- 43.417 - 43.741 - 44.065 - 44.390 - 45.038 - 45.038 - 45.686 - 46.010 - 46.334	229.733 229.409 229.085 228.760 228.436 228.112 227.788 227.464 227.140 226.816	3.08007 + 2 3.05730 3.03467 3.01217 2.98981 2.94759 2.94550 2.92354 2.90172 2.88002	2.31024 + 2 2.29316 2.27619 2.25931 2.24254 2.22587 2.20930 2.19283 2.17647 2.16020	3.03979 - 1 3.01732 2.99498 2.97278 2.97278 2.92878 2.90698 2.886377 2.86377 2.84236	4.6706 - 1 4.6427 4.6148 4.5871 4.5595 4.5597 4.5047 4.4775 4.4504 4.4234	3.8128 - 1 3.7899 3.7672 3.7446 3.7220 3.6996 3.6773 3.6551 3.6330 3.6110
9500 9550 9650 9650 9750 9850 9850 9950	9486 9536 9535 9635 9735 9735 9785 9835 9835	226.492 226.168 225.844 225.520 225.196 224.872 224.548 224.224 223.900 223.576	-46.658 -46.982 -47.306 -47.630 -47.954 -48.278 -48.602 -48.926 -48.926 -49.250	226.492 226.168 225.844 225.520 225.196 224.872 224.548 224.224 223.900 223.576	2.858%6 + 2 2.8370% 2.8157% 2.779%57 2.77353 2.75262 2.7318% 2.71119 2.69066 2.67026	2.14402 + 2 2.12795 2.11198 2.09610 2.08032 2.06464 2.04905 2.03356 2.01816 2.00286	2.82109 - 1 2.79994 2.77892 2.75803 2.73726 2.71663 2.69612 2.67573 2.655548 2.63534	4.3966 - 1 4.3699 4.3433 4.3169 4.2905 4.2643 4.2382 4.2123 4.1664 4.1607	3.5891 - 1 3.5673 3.55456 3.5240 3.5025 3.48811 3.4598 3.4175 3.3965
10000 10050 10100 10150 10200 10250 10300 10350 10400 10450	9984 10034 10084 10184 10184 10283 10283 10333 10383 10433	223.252 222.928 222.280 221.956 221.956 221.632 221.308 220.660 220.660 220.336	-49.898 -50.222 -50.546 -50.870 -51.518 -51.842 -52.490 -52.814	223.252 222.928 222.604 222.280 221.956 221.632 221.632 220.660 220.336	2.64999 + 2 2.62984 2.60981 2.58991 2.57013 2.55048 2.53094 2.51153 2.49224 2.47307	1.98765 + 2 1.97254 1.97254 1.95752 1.94259 1.92776 1.91302 1.89836 1.88381 1.86934	2.61533 - 1 2.59545 2.57568 2.55604 2.53652 2.51713 2.49785 2.47869 2.45965 2.44073	4.1351 - 1 4.1096 4.0843 4.0359 4.0339 4.0039 3.9840 3.9593 3.9593 3.9346 3.9101	3.3756 - 1 3.3548 3.3341 3.3135 3.2930 3.2726 3.2523 3.2523 3.2521 3.2119 3.1919
10500 10550 10600 10650 10750 10750 10800 10850 10900 10950	10483 10533 10562 10632 10632 10732 10762 10852 10851	220.013 219.689 219.365 219.041 218.717 218.393 218.069 217.745 217.421 217.097	-53.137 -53.461 -53.785 -54.109 -54.433 -54.435 -55.081 -55.405 -56.053	220.013 219.689 219.365 219.365 218.717 218.393 218.745 217.745 217.421 217.097	2.45402 + /2 2.43509 2.41628 2.39759 2.37901 2.36055 2.34221 2.32398 2.30567 2.28788	1.84067 + 2 1.82647 1.81236 1.79834 1.78441 1.77056 1.75680 1.74313 1.72955 1.71605	2.42193 - 1 2.40325 2.38468 2.36624 2.34790 2.32968 2.31158 2.29359 2.27572 2.25796	3.8657 - 1 3.8614 3.8372 3.8132 3.7892 3.7654 3.7417 3.7181 3.6946 3.6713	3.1720 - 1 3.1522 3.1324 3.1128 3.0738 3.0738 3.0545 5.0352 3.0160 2.9970

TABLE I.—Continued GEOPOTENTIAL ALTITUDE, METRIC UNITS

Alti	tude	ן	emperatur	e	-	Pressure		Den	sity
H, m	°-Z ç-m ≕	T;•°K	t, °Ç	Т _м ,°К	P, mb	P, mm Hg	P _o	ho, kg m ⁻³	<u>P</u> Po
11000 11100 11200 11300 11400 11500 11600 11700 11800	11019 11119 11220 11320 11420 11521 11621 11722 11822 11922	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	2.26320 + 2 2.22779 2.19294 2.15863 2.12486 2.09161 2.05889 2.02668 1.99497 1.96376	1.69754 + 2 1.67098 1.64484 1.61911 1.59377 1.56884 1.54430 1.52013 1.49635 1.47294	2.23361 - 1 2.19866 2.16426 2.13040 2.09707 2.06426 2.03197 2.06018 1.96888 1.93808	3.6392 - 1 3.5822 3.5262 3.4167 3.4167 3.3633 3.3106 3.2589 3.2079 3.1577	2.9708 - 1 2.9243 2.8785 2.8335 2.7892 2.7455 2.7026 2.6603 2.6187 2.5777
12000 12100 12200 12300 12400 12500 12600 12700 12800 12900	12023 12123 12223 12324 12424 12424 12525 12625 12725 12826 12926	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1,93304 + 2 1-90279 1-87302- 1-84372- 1-84372- 1-81488- 1-78648- 1-75853- 1-73102- 1-70394- 1-67728	1.44990 + 2 1.42721 1.40488 1.38290 1.36127 1.33997 1.3190,7 1.27806 1.25806	1.90776 - 1 1.87791 1.84853 1.81961 1.79114 1.76312 1.73554 1.70838 1.68165	3.1083 - 1 3.0596 3.0118 2.9647 2.9183 2.8726 2.8277 2.7834 2.7399 2.6970	2.5374 - 1 2.4977 2.4586 2.4201 2.3823 2.3450 2.3083 2.2722 2.2366 2.2017
13000 13100 13200 13300 13400 13500 13600 13700 13800 13900	13027 13127 13227 13328 13428 13529 13629 13730 13830 13930	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.65104 + 2 1.62521 1.59978 1.57475 1.55501 1.52586 1.50199 1.47849 1.45536 1.43259	1.23838 + 2 1.21900 1.19993 1.18116 1.16268 1.16268 1.14489 1.12658 1.10896 1.099161	1.62945 - 1 1.60395 1.57886 1.552416 1.552984 1.50591 1.48235 1.45033 1.43633	2.6548 - 1 2.6133 2.5724 2.5322 2.4925 2.4535 2.4152 2.3774 2.3402 2.3036	2.1672 - 1 2.1333 2.0999 2.0671 2.0347 2.0029 1.9716 1.9407 1.9104
14000 14100 14200 14300 14400 14500 14600 14700 14800 14900	14031 14131 14232 14332 14433 14533 14534 14734 14835 14935	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.41018 + 2 / 1.38811 1.36640 1.34502 1.32398 1.30326 1.28287 1.26280 1.24280 1.24280	1.05772 + 2 1.04117 1.02488 1.00885 9.93064 + 1 9.77527 9.62234 9.47179 9.32361 9.17774	1.39174 - 1 1.36996 1.34853 1.32743 1.30666 1.28622 1.26610 1.24629 1.22679 1.22679	2.2675 - 1 2.2321 2.1971 2.1928 2.1289 2.0956 2.0628 2.0306 1.9988 1.9675	1.8510 - 1 1.8221 1.7936 1.7655 1.7379 1.7107 1.6839 1.6576 1.6317
15000 15100 15200 15300 15400 15500 15600 15600 15800 15900	15035 15136 15236 15337 15437 15538 15638 15638 15639 15839	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.204%5 + 2 1.18561 1.16706 1.14880 1.13083 1.11314 1.09572 1.07858 1.06170 1.04509	9.034.15 + 1 8.89281 8.75368 8.61672 8.48191 8.34921 8.21859 8.09001 7.96344 7.83885	1.18870 - 1 1.17011 1.15190 1.13378 1.11604 1.09858 1.08139 1.06447 7.04782 1.03143	1.9367 - 1 1.9064 1.8766 1.8872 1.8183 1.7899 1.7619 1.7343 1.7072	1.5810 - 1 1.5563 1.5319 1.5080 1.4844 1.4611 1.4383 1.4158 1.3936 1.3718
16000 16100 16200 16300 16400 16500 16600 16700 16800 16900	16040 16141 16241 16342 16442 16543 16643 16744 16845 16945	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.0287k + 2 1.01265 9.96805 + 1 9.81210 9.65859 9.50748 9.35873 9.21231 9.06818 8.92631	7.71621 + 1 7.59549 7.47665 7.35968 7.24454 7.13119 7.01963 6.90980 6.80170 6.69528	1.01529 - 1 9.99406 - 2 9.83770 9.68379 9.53229 9.38315 9.23635 9.09185 8.94960 8.80958	1.6542 - 1 1.6283 1.6028 1.5778 1.5531 1.5588 1.5049 1.4813 1.4581 1.4353	1.3504 - 1 1.3292 1.3084 1.2880 1.2278 1.2480 1.2285 1.2092 1.1903 1.1717
17000 17100 17200 17300 17400 17500 17600 17700 17800 17900	17046 17146 17247 17347 17348 17548 17549 17749 17850 17951	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	8.78666 + 1 8.64919 8.51387 8.38067 8.24955 8.12049 7.79344 7.86838 7.74528	6.59053 + 1 6.48742 6.38593 6.28602 0.18767 6.09087 5.99557 5.90177 5.80944 5.71855	8.67176 - 2 8.53609 8.53609 8.27108 8.27108 8.14168 8.01430 7.88891 7.76549 7.64400 7.52440	1.4129 - 1 1.3908 1.3690 1.3476 1.3265 1.3058 1.2853 1.2652 1.2454 1.2259	1.1534 - 1 1.1353 1.1176 1.1001 1.0829 1.0659 1.0492 1.0328 1.0167 1.0008
18000 18100 18200 18300 18400 18500 18600 18700 18800	18051 18152 18252 18353 18453 18554 18655 18755 18856	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	7.50482 + 1 7.38741 7.27183 7.15806 7.04607 6.93583 6.82732 6.72051 6.61536 6.51187	5.62908 + 1 5.54101 5.45432 5.36899 5.28499 5.20230 5.12091 5.04080 4.96193 4.88430	7.40668 - 2 7.29080 7.17674 7.06446 6.95393 6.84514 6.73804 6.63263 6.52886 6.42671	1.2068 - 1 1.1879 1.1693 1.1510 1.1330 7.1153 1.0978 1.0806 1.0637 1.0474	9.8511 - 2 9.6970 9.5%52 9.3959 9.2489 9.1042 8.9618 8.8216 8.6835 8.5%77

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TABLE I.—Continued

GEOMETRIC ALTITUDE, METRIC UNITS

Alti	tude 🕏	; т	emperațur	e	· · · · · ·	Pressure		Den	sity
Z, m	H, m	T,°K	t,°C	T _M ,°K	P, mb	P, mm Hg	P P _o	ρ, kg m ⁻³	$\frac{\rho}{\rho_{\rm o}}$
11000 11100 11200 11300 11400 11500 11600 11700 11800	10981 11081 11180 11280 11380 11479 11579 11679 11778 11878	216.774 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.376 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.774 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	2.26999 + 2 2.23460 2.19976 2.16547 2.13171 2.09848 2.06576 2.03356 2.00186 1.97066	1.70263 + 2 1.67609 1.64996 1.62423 1.59891 1.57.399 1.52530 1.50152 1.47812	2.24031 - 1 2.20538 2.17100 2.13715 2.10383 2.07103 2.03875 2.00697 1.97568 1.94489	3.6480 - 1 3.5932 3.5372 3.4820 3.4277 3.3743 3.3217 3.2699 3.2189 3.1688	2.9780 - 1 2.9332 2.8875 2.8425 2.7982 2.7545 2.7116 2.6693 2.6277 2.5868
12000 12100 12200 12300 12400 12500 12600 12700 12800 12900	11977 12077 12177 12276 12376 12475 12575 12675 12774 12874	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.93998 + 2 1.90970 1.87998 1.85064 1.82180 1.79381 1.76586 1.73795 1.71086 1.68420	1.45508 + 2 1.43240 1.41007 1.38809 1.36646 1.34517 1.32420 1.30357 1.28325 1.26326	1.91457 - 1 1.88473 1.85536 1.82644 1.79797 1.76995 1.74237 1.71522 1.68849 1.66218	3.1194 - 1 3.0708 3.0229 2.9758 2.9294 2.8838 2.8388 2.7946 2.7510 2.7082	2.5464 - 1 2.5067 2.4677 2.4292 2.3914 2.3541 2.3174 2.2813 2.2457 2.2107
13000 13100 13200 13300 13400 13500 13600 13700 13800 13900	12973 13073 13173 13272 13372 13471 13571 13671 13770 13870	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.65796 + 2 1.63213 1.60670 1.58166 1.55702 1.53276 1.50888 1.48538 1.48538 1.48538	1.24357 + 2" 1.22420 1.20512 1.18634 1.16786 1.1967 1.13176 1.11412 1.09677 1.07968	1.63628 - 1 1.61078 1.58569 1.56098 1.53666 1.51272 1.48915 1.46512 1.46312	2.6660 - 1 2.6244 2.5835 2.5433 2.5037 2.4646 2.4262 2.3684 2.3512 2.3146	2.1763 - 1 2.1424 2.1090 2.0761 2.0438 2.0120 1.9806 1.9498 1.9194 1.8895
14000 14100 14200 14300 14400 14500 14600 14700 14800 14900	13969 14069 14168 14268 14367 14467 14567 14566 14766 14766	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.41704 + 2 1.39496 1.37323 1.35184 1.33079 1.31006 1.28966 1.26957 1.24980 1.23034	1.06286 + 2 1.04631 1.03001 1.01397 9.88174 + 1 9.82628 9.67324 9.52259 9.37429 9.22831	1.39851 - 1 1.37672 1.35528 1.335417 1.31339 1.29293 1.27279 1.25297 1.25297 1.23346 1.21425	2.2786 - 1 222431 2.2081 2.1737 2.1399 2.1065 2.0737 2.0414 2.0097 1.9784	1.8600 - 1 1.8311 1.8026 1.7745 1.7468 1.7196 1.6928 1.6665 1.6405
15000 - 15100 15200 15300 15400 15500 15600 15700 15800	14965 15064 15164 15263 15363 15462 15562 15661 15761 15860	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.21118 + 2 1.19232 1.17375 1.15548 1.13749 1.11978 1.10234 1.08518 1.06828 1.05165	9.08460 + 1: 8.94313 8.80388 8.66679 8.53185 8.39901 8.26824 8.13951 8.01279 7.88805	1.19534 - 1 1.17673 1.15840 7.14037 1.12261 7.10513 1.08793 1.07099 7.05431 1.03790	1.9475 - 1 1.9172 1.8874 1.82580 1.8291 1.8206 1.7725 1.7449 1.7178	1.5898 - 1 1.5651 1.5407 1.5167 1.4931 1.4699 1.4470 1.4244 1.4023
16000 16100 16200 16300 16400 16500 16600 16700 16800 16900	15960 16059 16159 16258 16358 16457 16557 16556 16756 16855	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	1.03528 + 2 1.01916 1.00330 9.87682 + 1 9.72309 9.57175 9.42276 9.27611 9.13174 8.98962	7.76525 + 1 7.64436 7.52537 7.40823 7.29291 7.17940 7.06765 6.945765 6.84936 6.74277	1.02174 - 1 1.00584 9.90180 - 2 9.74767 9.59594 9.44658 9.29954 9.15481 9.01232 8.87206	1.6647 - 1 1.6388 1.6133 1.5882 1.5634 1.55391 1.5152 1.4916 1.4684 1.4455	1.3589 - 1 1.3378 1.3170 1.2965 1.2763 1.2564 1.2369 1.2176 1.1987 1.1800
17000 17100 17200 17300 17400 17500 17600 17700 17800	16955 17054 17154 17253 17352 17452 17551 17651 17750 17850	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	8.84971 + 1 8.71199 8.57642 8.44296 8.31158 8.18225 8.05493 7.92961 7.80623 7.68478	6.63783 + 1 6.53453 6.43284 6.33274 6.23420 6.13719 6.04170 5.94769 5.85515 5.76406	8.73399 - 2 8.59807 8.46427 8.33255 8.20289 8.07525 7.94960 7.82591 7.70415 7.58429	1.4230 - 1 1.4009 1.3791 1.3576 1.3365 1.3157 1.2952 1.2751 1.2552 1.2552	1.1616 - 1 1.1436 1.1258 1.1083 1.0910 1.0740 1.0573 1.0409 1.0247 1.0087
18,000 18,100 18,200 18,300 18,400 18,500 18,600 18,700 18,800	17949 18049 18148 18247 18347 18446 18546 18645 18745	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	7.56522 + 1 7.44752 7.33166 7.21761 7.10533 6,99481 6.88600 6.77889 6.67345 6.56966	5.67438 + 1 5.58610 5.4920 5.41365 5.32944 5.24654 5.16493 5.08459 5.00550 4.92765	7.46629 - 2 7.35014 7.23579 7.12323 7.01242 6.90334 6.79596 6.69025 6.58619 6.48375	1.2165 - 1 1.1975 1.1789 1.1606 1.1425 1.1247 1.1073 1.0900 1.0731	9.9304 - 2 9.7759 9.6238 9.4741 9.3267 9.1816 9.0388 8.8982 8.7598 8.6236

TABLE I.—Continued GEOPOTENTIAL ALTITUDE, METRIC UNITS

\$ A14:		-				C, WEIRIC			
Alti	tude	. I	emperatur	e		Pressure		Den	sity
Н, т	Z, m	т, °К	t,°G	T _M ,°K	P, mb	P, mm Hg	P _o	ρ, kg: m ^{: *} .	<u>P</u>
19000 19100 19200 19300 19400 19500 19600 19700 19800 19900	19057 19158 19258 19359 19459 19560 19661 19761 19862 19963	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	6.40999 + 1 6.30970 6.21098 6.11381 6.01816 5.92401 5.83132 5.74009 5.65029 5.56189	4.80788 + 1 4.73267 4.65862 4.58574 4.51399 4.44337 4.37385 4.30542 4.23806 4.17176	6.32616 - 2 6.22719 6.12977 6.03386 5.93946 5.84654 5.75507 5.66503 5.57640 5.48916	1.0307 - 1 1.0146 - 2 9.9871 - 2 9.8309 9.6771 9.5257 9.3766 9.2299 9.0855 8.9434	8.4140 - 2 8.2823 8.1527 8.0252 7.8796 7.7760 7.6544 7.5346 7.4168 7.3007
20000 20100 20200 20300 20400 20500 20600 20700 20800 20900	20063 20164 20264 20365 20466 20566 20566 20667 20768 20868 20969	216.650 216.750 216.850 216.850 217.050 217.050 217.350 217.350 217.450 217.450	-56.500 -56.400 -56.300 -56.200 -56.100 -56.000 -55.800 -55.800 -55.600	216.650 216.750 216.850 216.850 217.050 217.050 217.250 217.350 217.450 217.550	5.47487 + 1 5.38924 5.30498 5.22208 5.14051 5.06025 4.98128 4.90358 4.82712 4.75189	4.10649 + 1 4.04226 3.97906 3.91688 3.85570 3.73627 3.67799 3.62064 3.56421	5.40328 - 2 5.31876 5.23567 5.15379 5.07329 4.99408 4.91614 4.83945 4.76400 4.68976	8.8035 - 2 8.6618 8.5224 8.3854 8.2506 8.1180 7.9877 7.8594 7.7333 7.6093	7.1865 - 2 7.0708 6.9571 6.8452 6.7352 6.6270 6.5205 6.4159 6.3129 6.2117
21000 21100 21200 21300 21400 21500 21600 21600 21700 21800 21900	21070 21170 21271 21372 21472 21573 21674 21774 21875 21976	217.650 217.750 217.850 217.950 218.050 218.150 218.250 218.350 218.450 218.550	-55.500 -55.400 -55.300 -55.200 -55.100 -55.000 -54.900 -54.800 -54.600	217.650 217.750 217.850 217.950 218.050 218.150 218.250 218.350 218.450 218.550	4.67787 + 1 4.60504 4.53337 5.46285 4.39345 4.32517 4.25798 4.19186 4.12660 4.06278	3.50869 + 1 3.45406 3.40031 3.34741 3.29536 3.24414 3.19375 3.14415 3.09733	4.61670 - 2 4.54482 4.47409 4.40449 4.35600 4.26861 4.20230 4.13705 4.07284 4.00965	7.4873 - 2 7.3674 7.2494 7.1333- 7.0192 6.9969 6.7965 6.6879 6.5811 6.4761	6.1121 - 2 6.0142 5.9179 5.8231 5.7300 5.6383 5.5482 5.4595 5.3723 5.2866
22000 22100 22200 22300 22400 22500 22600 22700 22800 22900	22076 22177 22278 22379 22479 22580 22681 22781 22882 22983	218.650 218.750 218.850 218.950 219.050 219.150 219.250 219.450 219.550	-54.500 -54.400 -54.300 -54.300 -54.000 -53.900 -53.800 -53.700 -53.600	218.650 218.750 218.850 218.950 219.050 219.150 219.250 219.350 219.450 219.550	3.99978 + 1 3.93778 3.87678 3.81674 3.75766 3.69953 3.64231 3.538601 3.53861 3.47608	3.00008 + 1 2.95358 2.90782 2.86279 2.81848 2.77487 2.73196 2.68973 2.648973 2.64817 2.60727	3.94747 - 2 3.88629 3.82608 3.76683 3.76852 3.65115 3.59468 3.53912 3.48444 3.43062	6.3727 - 2 6.2711 6.1711 6.0728 5.9760 5.8809 5.7873 5.6952 5.6057 5.5156	5.2022 - 2. 5.1192 5.0376 4.9574 4.8784 4.8007 4.7243 4.6492 4.5753 4.5026
23000 23100 23200 23300 23400 23500 23600 23700 23800 23900	23084 23184 23285 23386 23486 23587 23688 23789 23889 23990	219.650 219.750 219.850 219.950 220.050 220.150 220.350 220.350 220.450 220.550	-53.500 -53.400 -53.300 -53.200 -53.100 -52.900 -52.800 -52.600	219.650 219.750 219.850 219.950 220.050 220.150 220.250 220.350 220.450 220.550	3.42242 + 1 3.36961 3.31765 3.26650 3.21617 3.16663 3.11788 3.06991 3.02269 2.97622	2.56703 + 1 2.52742 2.48844 2.45008 2.41232 2.37517 2.33861 2.30262 2.26720 2.23235	3.37767 - 2 3.32555 3.27426 3.22379 3.17411 3.12523 3.07711 3.02976 2.98316 2.93730	5.4280 - 2 5.3418 5.2570 5.1737 5.0916 5.0109 4.9315 4.8534 4.77011	4.4310 - 2 4.3607 4.2915 4.2234 4.1564 4.0905 4.0257 3.9620 3.8993 3.8376
24000 24100 24200 24300 24300 24500 24500 24700 24800 24900	24091 24192 24292 24393 24494 24595 24696 24796 24897 24998	220.450 220.750 220.850 220.950 221.050 221.150 221.350 221.450 221.550	-52.500 -52.400 -52.300 -52.200 -52.100 -51.800 -51.700 -51.600	220.650 220.750 220.850 220.950 221.050 221.150 221.350 221.450 221.450	2.93048 + 1 2.88547 2.88117 2.77756 2.75465 2.71241 2.67084 2.62993 2.58966 2.55002	2.19804 + 1 2.16428 2.13105 2.09835 2.06616 2.03448 2.00330 1.97261 1.94240 1.91268	2.89216 - 2 2.84774 2.80401 2.76098 2.71863 2.67494 2.63592 2.59554 2.555580 2.51668	4.6267 - 2 4.5536 4.4816 4.4109 4.3412 4.2727 4.2054 4.1391 4.0739 4.0097	3.7769 - 2 3.7172 3.6585 3.66007 3.5439 3.4880 3.4329 3.3788 3.3256 3.2732
25000 25100 25200 25300 25400 25500 25600 25700 25800 25900	25099 25200 25300 25401 25503 25704 25804 25905 26006	221.650 221.750 221.850 221.950 222.050 222.150 222.350 222.350 222.350	-51.500 -51.400 -51.300 -51.200 -51.100 -51.000 -50.900 -50.800 -50.700 -50.600	221.650 221.750 221.850 221.950 222.050 222.150 222.350 222.350 222.350	2.51101 + 1 2.47262 2.43482 2.39762 2.36101 2.32497 2.28950 2.25458 2.22021 2.18638	1.88341 + 1 1.85461 1.82627 1.79337 1.77.090 1.74387 1.71.726 1.69107 1.66530 1.63992	2.47818 - 2. 2.44028 2.40298 2.36627 2.33013 2.29457 2.25956 2.22510 2.19116 2.15779	3.9466 - 2 3.8845 3.8234 3.7633 3.7041 3.6459 3.5887 3.5524 3.4770 3.4224	3.2217 - 2 3.1710 3.1211 3.0720 3.0236 2.9763 2.9295 2.8836 2.8383 2.7938
26000 26100 26200 26300 26400 26500 26600 26700 26800 26900	26107 26208 26308 26409 26510 26611 26712 26813 26913 27014	222.650 222.750 222.850 222.950 223.050 223.150 223.250 223.450 223.550	-50.500 -50.400 -50.300 -50.200 -50.100 -50.000 -49.900 -49.700 -49.600	222.650 222.750 222.850 222.950 223.150 223.250 223.250 223.450 223.550	2.15308 + 1 2.12031 2.08804 2.05628 2.02502 1.99425 1.76396 1.93414 1.90479 1.87589	1.61495 + 1 1.59036 1.56616 1.54234 1.51889 1.49581 1.47309 1.45072 1.42871 1.40704	2.12493 - 2 2.09258 2.06074 2.02939 1.99854 1.96817 1.93828 1.90885 1.87988	3.3698 - 2 3.3160 3.2641 3.2130 3.1628 3.1133 3.0046 3.0168 2.9696 2.9233	2.7500 - 2 2.7070 2.6646 2.6229 2.5818 2.5415 2.5017 2.4627 2.4242 2.3864

 $\begin{array}{c} \text{TABLE I.} - \text{Continued} \\ \otimes \\ \text{GEOMETRIC ALTITUDE,} \\ \otimes \\ \text{METRIC UNITS} \end{array}$

Alti	tude	. 7	emperatur	e	·	Pressure	0	Den	sity
Z,~m	H, m	т, °к	t,°C	т _м ,°К	P, mb	P, mm Hg	<u>е</u> Р°	ρ. kg m ⁻¹	- <u>P</u>
19000 19100 19200 19300 19400 19500 19600 19700 19800 19800	18943 19043 19142 19242 19341 19440 19540 19639 19739 19838	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650 216.650	6.46748 + 1 6.36689 6.26788 6.17040 6.07445 5.97998 5.88699 5.79545 5.70534 5.61663	4.85101 + 1 4.77556 4.70129 4.62818 4.55621 4.48536 4.41561 4.34695 4.27936 4.21282	6.38291 - 2 6.28364 6.18591 6.08971 5.99501 5.99501 5.81001 5.71967 5.63073 5.54318	1.0400 - 1 1.0238 1.0079 9.9219 - 2 9.7676 9.6157 9.4661 9.3190 9.1740 9.0314	8.4894 - 2 8.3574 8.2274 8.0995 7.9735 7.8495 7.7275 7.6073 7.4890 7.3726
20000 20100 20200 20300 20400 20500 20600 20700 20800 20900	19937 20037 20136 20235 20335 20434 20533 20633 20732 20632	216.650 216.687 216.786 216.385 216.985 217.084 217.183 217.283 217.382 217.481	-56.500 -56.463 -56.364 -56.265 -56.066 -55.967 -55.768 -55.768	216.650 216.687 216.786 216.885 216.985 217.084 217.183 217.283 217.283 217.481	5.52930 + 1 5.44334 5.35874 5.27550 5.19360 5.13369 4.95565 4.87886 4.80329	4.14732 + 1 4.08284 4.01939 3.95695 3.89552 3.83506 3.77558 3.71704 3.65945 3.60276	5.45700 - 2 5.37216 5.28867 5.20651 5.12568 5.12568 4.96786 4.89085 4.81506 4.74048	8.8910 - 2 8.7513 8.6113 8.4737 8.3383 8.2051 8.0742 7.9454 7.8187	7-2579 - 2 7-1439 7-0297 6-9173 6-8068 6-6981 6-5912 6-4860 6-3826 6-2809
21000 21100 21200 21300 21400 21500 21600 21600 21700 21800 21900	20931 21030 21130 21229 21328 21428 21527 21626 21725 21825	217.581 217.680 217.780 217.879 217.978 218.078 218.177 218.276 218.375 218.475	-55.569 -55.470 -55.370 -55.271 -55:172 -55.072 -54.973 -54.874 -54.675	217.581 217.680 217.780 217.978 217.978 218.078 218.177 218.276 218.375 218.475	4.72893 + 1 4.65576 4.58376 4.51289 4.44317 4.37455 4.30702 4.24057 4.17518 4.11082	3.54699 + 1 3.49211 3.43810 3.38495 3.28118 3.23053 3.18069 3.13164 3.08337	4.66709 - 2 4.59488 4.52382 4.62388 4.63388 5.38507 5.31735 4.25070 4.18512 4.12058 4.05707	7.5715 - 2 7.4509 7.3323 7.2157 7.1010 6.9881 6.8771 6.7679 6.6605 6.5549	6.1808 - 2 6.0824 5.9856 5.8904 5.7967 5.7046 5.6140 5.5248 5.4372 5.3509
22000 22100 22200 22300 22400 22500 22600 22700 22800 22900	21924 22023 22123 22222 22321 22421 22520 22619 22719 22818	218.574 218.673 218.773 218.872 218.971 219.071 219.269 219.369 219.468	-54.576 -54.477 -54.377 -54.377 -54.179 -54.179 -53.980 -53.881 -53.781 -53.682	218.574 218.673 218.773 218.872 218.971 219.071 219.071 219.269 219.369 219.468	4.04749 + 1 3.98517 3.92383 3.86346 3.86406 3.74559 3.68805 3.63143 3.57569 3.52084	3.03587 + 1 2.98912 2.94311 2.89784 2.85328 2.80942 2.76627 2.72379 2.68199 2.64085	3.99456 - 2 3.93305 3.87252 3.81294 3.75431 3.69661 3.63982 3.58394 3.52893 3.47480	6.4510 - 2 6.3488 6.2482 6.1493 6.0520 5.9563 5.8621 5.7695 5.6784 5.5887	5.2661 - 2 5.1827 5.1006 5.0198 4.9404 4.8623 4.7854 4.7098 4.6354 4.5622
23000 23100 23200 23300 23500 23500 23600 23700 23800 23900	22917 23016 23116 23215 23314 23413 23513 23612 23711 23810	219.567 219.666 219.766 219.865 219.964 220.063 220.163 220.262 220.361 220.460	-53.583 -53.484 -53.384 -53.186 -53.186 -53.087 -52.987 -52.888 -52.789 -52.690	219.567 219.666 219.766 219.865 219.964 220.063 220.163 220.262 220.361 220.460	3.46686 + 1 3.41373 3.36144 3.30997 3.25932 3.20947 3.16040 3.11211 3.06657 3.01779	2.60036 + 1 2.56051 2.52129 2.48268 2.44469 2.40730 2.37050 2.33427 2.29862 2.26353	3.42153 - 2 3.36909 3.31748 3.26669 3.21670 3.16750 3.16750 3.1750 3.07141 3.02250 2.97833	5.5006 - 2 5.4138 5.3285 5.2445 5.1619 5.0807 5.0008 4.7021 4.8448 4.7687	4.4903 - 2 4.4194 4.2813 4.2138 4.11475 4.0823 4.0181 3.9549 3.8928
24000 24100 24200 24300 24500 24500 24600 24700 24800 24900	23910 24009 24108 24207 24307 24307 24505 24505 24604 24704 24803	220.560 220.659 220.758 220.857 220.957 221.056 221.155 221.254 221.354 221.453	-52.590 -52.491 52.392 -52.293 -52.193 -52.094 -51.896 -51.796 -51.697	220.560 220.659 220.758 220.857 220.957 221.056 221.155 221.254 221.358 221.453	2.97174 + 1 2.92642 2.88180 2.83789 2.75467 2.75213 2.71025 2.66904 2.62847 2.58853	2.22899 + 1 2.19499 2.16153 2.12859 2.09618 2.06427 2.03286 2.00194 1.97151	2.93288 - 2 2.88815 2.88412 2.80078 2.75813 2.71614 2.67881 2.634:13 2.599.09 2.55468	4.6938 - 2 4.6201 4.5476 4.4763 4.4062 4.3372 4.2692 4.2024 4.1367	3.8317 - 2 3.7715 3.7715 3.6541 3.5969 3.5405 3.4851 3.4306 3.3769 3.3241
25000 25100 25200 25300 25400 25500 25600 25700 25800 25900	24902 25001 25100 25200 25299 25398 25497 25597 25696 25795	221.552 221.65,8 221.750 221.850 221.949 222.048 222.147 222.246 222.346 222.445	-51.499 -51.409 -51.400 -51.300 -51.201 -51.102 -51.003 -50.903 -50.905	221.552 221.657 221.750 221.850 221.949 222.048 222.147 222.246 222.346 222.445	2.54922 + 1 2.51052 2.47243 2.43494 2.39803 2.36170 2.32593 2.29073 2.25607 2.22196	1.91207 + 1 1.88305 1.85448 1.82635 1.77887 1.77742 1.74459 1.71819 1.69219	2.51588 - 2- 2.44010 2.44010 2.40310 2.36667 2.33081 2.29552 2.26077 2.22657 2.19290	#.0084 = 2 3.9458 3.8842 3.8236 3.7639 3.7052 3.6475 3.5907 3.5348 3.4798	3.2722 = 2 3.2210 3.1707 3.1213 3.0726 3.0247 2.9775 2.9312 2.8855 2.8406
26000 26100 26200 26300 26500 26500 26600 26600 26900	25894 25993 26092 26192 26192 26291 26390 26489 26588 26687 2678	222.544 222.643 222.742 222.842 222.941 223.040 223.139 223.238 223.337 223.437	-50.606 -50.507 -50.408 -50.308 -50.209 -50.110 -50.011 -49.912 -49.813 -49.713	222.544 222.643 222.742 222.842 222.941 223.040 223.139 223.238 223.337 223.437	2.18837 + 1 2.15531 2.12277 2.090073 2.05919 2.02814 1.99757 1.96747 1.93785 1.90868	1.64141 + 1 1.61662 1.59221 1.55617 1.54452 1.52123 1.49830 1.47573 1.45351 1.43163	2.15976 - 2 2.12713 2.09501 2.00339 2.03226 2.00161 1-97145 1.94175 1.91251 1.88372	3.4257 - 2 3.3724 3.3700 3.2177 3.1678 3.1186 3.0703 3.0227 2.9759	2.7965 - 2 \\ 2.7530 \\ 2.7102 \\ 2.6681 \\ 2.6267 \\ 2.5359 \\ 2.5458 \\ 2.5064 \\ 2.4675 \\ 2.4293

TABLE I.—Continued
GEOPOTENTIAL ALTITUDE, METRIC UNITS

Alti	tude	Т	emperatur	e		Pressure		Den	sity
H _i m	Z, m	т,°к	t,°C	T _M ,°K	P, mb	P, mm Hg.	<u>P</u> P°	ρ, kg. m ⁻³	<u>P</u> Po
27000 27100 27200 27300 27400 27500 27600 27600 27600 27800 27900	27115 27216 27317 27418 27519 27620 27720 27821 27922 28023	223.650 223.750 223.850 223.850 224.050 224.150 224.250 224.350 224.350 224.350	-49.500 -49.400 -49.300 -49.200 -49.000 -48.900 -48.800 -48.600	223.650 223.750 223.850 223.850 224.050 224.150 224.250 224.350 224.550	1.84745 + 1 1.81945 1.79189 1.76475 1.73804 1.71175 1.68586 1.66038 1.63529 1.61060	1.38570 + 1 1.36470 1.34403 1.32367 1.30364 1.28392 1.26450 1.24539 1.2657 1.20805	1.82329 - 2 1.79566 1.76845 1.74168 1.71531 1.68936 1.66382 1.63867 1.61391 1.58953	2.8777 - 2 2.8328 2.7886 2.7452 2.7024 2.6604 2.6190 2.5782 2.5381 2.4987	2.3491 - 2 2.3125 2.2764 2.2410 2.2061 2.1717 2.1379 2.1047 2.0719 2.0397
28000 28100 28200 28300 28400 28500 28600 28700 28800 28900	28124 28225 28326 28427 28527 28628 28729 28830 28931 29032	224.650 224.750 224.850 224.950 225.050 225.150 225.350 225.350 225.450 225.550	-48.500 -48.400 -48.300 -48.200 -48.100 -47.900 -47.800 -47.700 -47.600	224.650 224.750 224.850 224.950 225.050 225.150 225.250 225.350 225.450 225.550	1.58628 + 1 1.56235 1.53878 1.51559 1.49275 1.47026 1.44813 1.42633. 1.40488 1.38375	1.18981 + 1 1.17186 1.15418 1.13678 1.11965 1.10279 1.08618 1.06984 1.05375 1.03790	1.56554 2 1.54192 1.51866 1.49577 1.47323 1.45104 1.42919 1.40768 T.38651 1.36566	2.4599 - 2 2.4217 2.3841 2.3471 2.3107 2.2749 2.2396 2.2050 2.1708 2.1372	2.0081 - 2 1.9769 1.9462 1.9160 1.8863 1.8571 1.8283 1.8000 1.7721
29000 29100 29200 29300 29400 29500 29600 29700 29800 29900	29133 29234 29335 29436 29537 29638 29738 29738 29839 29940 30041	225.650 225.750 225.850 225.950 226.050 226.150 226.250 226.350 226.450 226.550	-47.500 -47.400 -47.300 -47.200 -47.100 -46.900 -46.800 -46.700 -46.600	225.450 225.750 225.850 225.950 226.050 226.150 226.350 226.450 226.550	1.36296 + 1 1.34248 1.32232 1.30248 1.28294 1.26370 1.24476 1.22610 1.20774 1.18966	1.02230 + 1 1.00694 9.91825 + 0 9.76939 9.62281 9.47851- 9.33643 9.19654 9.05881 8.92321	1.34514 - 2 1.32493 1.30503 1.20503 1.22645 1.22616 1.24717 1.22848 1.21007 1.19195	2.1042 - 2 2.0717 2.0397 2.0082 1.9771 1.9466 1.8871 1.8871 1.8580 1.8294	1.7177 - 2 1.6912 1.6650 1.6393 1.6140 1.5891 1.5646 1.5405 1.5167
30000 30100 30200 30300 30400 30500 30600 30700 30800 30900	30142 30243 30344 30445 30546 30647 30748 30849 30950 31051	226.650 226.750 226.850 226.950 227.050 227.150 227.350 227.450 227.450	-46.500 -46.400 -46.300 -46.200 -46.100 -45.900 -45.900 -45.700 -45.600	226.650 226.750 226.850 226.950 227.050 227.150 227.350 227.350 227.450 227.550	1.17186 + 1 1.15433 1.13708 1.12008 1.12008 1.03355 1.08688 1.07066 1.05469 1.03596	8.78968 + 0 8.65821 8.52877 8.40132 8.27583 8.15226 8.03060 7.91080 7.79284 7.67669	1.1565% - 2 1.13924 1.12221 1.10544 1.08892 1.07267 1.05666 1.04090 1.02537 1.01009	1.8012 - 2 1.7735 1.7462 1.7193 1.6929 1.6669 1.6413 1.6161 1.5913	1.4704 - 2 1.4477 1.4275 1.4035 1.3820 1.3607 1.3398 1.3193 1.2990
31000 31100 31200 31300 31400 31500 31700 31800 31900	31152 31253 31354 31455 31556 31657 31758 31859 31960 32061	227.650 227.750 227.850 227.950 228.050 228.150 228.250 228.350 228.450 228.450	-45.500 -45.400 -45.300 -45.200 -45.000 -44.900 -44.800 -44.600	227.650 227.750 227.850 227.950 228.050 228.150 228.250 228.350 228.450 228.550	1.00823 + 1 9.73213 + 0 9.78427 9.63871 9.49536 9.35421 9.21521 9.07834 8.94356 8.61084	7.56232 + 0 7.44971 7.33882 7.22963 7.12211 7.01623 6.91197 6.80931 6.70822 6.60867	9.95043 - 3 9.80225- 9.65634- 9.51267- 9.37120- 9.23188- 9.09470- 8.95962- 8.82661- 8.69562-	1.5429 - 2 155.92 1.4731 1.4731 1.4505 1.4285 1.4065 1.3638 1.3430	1.2595 - 2 1.2402 1.2212 1.2025 1.1841 1.1660 1.1481 1.1306 1.1133
32000 32200 32400 32600 32800 33000 33200 33400 33600 33800	32162 32364 32566 32768 32970 33172 33374 33576 33779 33981	228.650 229.210 229.770 230.330 230.890 231.450 232.010 232.570 233.130 233.690	-44.500 -43.940 -43.380 -42.820 -42.260 -41.700 -41.140 -40.580 -40.020 -39.460	228.650 229.210 229.770 230.330 230.890 231.450 232.010 232.570 233.130 233.690	8.68014 + 0 8.42490 8.17776 7.93845 7.70669 7.48224 7.26485 7.05427 6.85028 6.652.5	6.51064 + 0 6.31920 6.13383 5.95433 5.78050 5.61214 5.44908 5.29114 5.33813 4.98990	8.56663 - 3 8.31473 8.07082 7.83464 7.60592 7.38440 7.16985 6.96202 6.76070 6.56566	1.3225 - 2 1.2805 1.2399 1.2007 1.1628 1.1262 1.0908 1.0567 1.0236	1.0796 - 2 1.0453 1.0121 9.8014 - 3 9.4922 9.1934 8.9048 8.6258 8.3563 8.0957
34000 34200 34400 34600 35000 35200 35400 35600 35800	34183 34385 34587 34789 34992 35194 35396 35598 35801 36003	234.250 234.810 235.370 235.930 236.490 237.050 237.610 238.170 238.730 239.290	-38.900 -38.340 -37.780 -37.220 -36.660 -36.100 -35.540 -34.420 -33.860	234.250 234.810 235.370 235.930 236.490 237.050 237.610 238.170 238.730 239.290	6.46119 + 0 6.27566 6.09589 5.92168 5.75284 5.58920 5.43059 5.27683 5.12777	4.84629 + 0 4.70714 4.57230 4.44163 4.31499 4.19225 4.07327 3.95795 3.84614 3.73775	6.37669 - 3 6.19360 0.01618 5.84425 5.67762 5.51611 5.35957 5.20762 5.06071 4.91809	9.6088 - 3 9.3107 9.0225 8.7438 8.4744 8.4744 7.9620 7.7183 7.4627 7.2548	7.8439 - 3 7.6006 7.3653 7.1378 6.9179 6.7052 6.4996 6.3007 6.1083 5.9223
36000 36400 36600 36600 37000 37000 37400 57600	36205 36407 36610 36812 37014 37217 37419 37621 37824 38026	239.850 240.410 240.970 241.530 242.650 243.210 243.770 244.330 244.890	-33.300 -32.740 -32.180 -31.620 -31.060 -30.500 -29.940 -29.380 -28.820 -28.260	23° 850 240.410 240.970 241.530 242.650 243.210 243.770 244.330 244.890	4.84314 + 0 4.70727 4.57552 4.44775 4.32384 4.20364 4.08706 3.97397 3.66425 3.75780	3.63265 + 0 3.53075 3.43192 3.33609 3.24314 3.15299 3.06555 2.98072 2.898072 2.89843 2.81858	4.77981 - 3 4.64572 4.51569 4.38959 4.26730 4.14867 4.03361 3.92200 3.81372 3.70866	7.0344 - 3 6.8211 6.6148 6.4152 6.2220 6.0351 5.8542 5.6791 5.5097 5.3457	5.7423 - 3 5.5683 5.3998 5.2369 5.0792 4.9266 4.7789 4.6360 4.4977 4.3638

TABLE I.—Continued
GEOMETRIC ALTITUDE, METRIC UNITS

Alti	tude	, 7	emperatur	e e		Pressure		Den	sity
Z, m	H, m	т, •к	t,°C	T _M ,°K	P, mb	P, mm Hg	P _o	ρ, kg m ⁻³	<u>ρ</u> <u>ρ</u> ο
27000 27100 27200 27300 27400 27500 27600 27700 27800 27900	26886 26985 27084 27183 27282 27382 27481 27580 27679 27778	223.536 223.635 223.635 223.833 223.932 224.032 224.131 224.230 224.329 224.230	-49.614 -49.515 -49.416 -49.218 -49.218 -49.019 -48.920 -48.821 -48.722	223.536 223.635 223.73h 223.833 223.932 224.032 224.131 224.230 224.329 224.428	1.87997 + 1 1.85170 1.82387 1.79685 1.76950 1.74294 1.71680 1.66571 1.66076	1. #1009 + 1 1.38889 1.38889 1.36802 1.34747 1.32723 1.30732 1.28770 1.26840 1.24939 1.23067	1.85539 - 2 1.82749 1.80002 1.77298 1.74636 1.72015 1.69435 1.66694 1.64343 1.61931	2.9298 - 2 2.88%5 2.83%9 2.7900 2.7528 2.7103 2.668% 2.6273 2.55667 2.5469	2.3917 - 2 2.3547 2.5163 2.2824 2.2472 2.2125 2.1783 2.1447 2.1116 2.0791
28000 28100 28200 28300 28500 28500 28600 28700 28800 28900	27877 27976 28075 28175 28175 28274 28373 28472 28571 28670 28769	224.527 224.626 224.725 224.825 224.924 225.023 225.122 225.221 225.320 225.419	-48.623 -48.524 -48.425 -48.226 -48.127 -48.028 -47.929 -47.830 -47.731	224.527 224.626 224.725 224.728 224.924 225.023 225.122 225.221 225.221 225.320 225.419	1.61619 + 1 1.59201 1.56819 1.54474 1.52166 1.49893 1.47655 1.45451 1.43282 1.41145	1.21225 + 1 1.19410 1.17624 1.15865 1.14134 1.1229 1.10750 1.09097 1.077470 1.05868	8.59506 - 2 1.57149 1.58769 1.52858 1.50176 7.87933 1.45724 1.43589 1.4168	2.5076 - 2 2.4690 2.4310 2.3936 2.3568 2.3206 2.2849 2.2498 2.2153 2.1813	2.0470 - 2 2-0.155 1-9845 1-9540 1-9239 1-8943 1-8652 1-8366 1-8084
29000 29100 29200 29300 29400 29500 29600 29700 29800 29900	28868 28967 29066 29166 29265 29364 29463 29562 29661 29760	225.518 225.617 225.716 225.915 226.014 226.113 226.212 226.311 226.410	-47.632 -47.533 -47.434 -47.235 -47.136 -47.037 -46.938 -46.839 -46.740	225.518 225.617 225.716 225.816 225.915 226.014 226.113 226.212 226.311 226.410	1.39042 + 1 1.36971 1.34931 1.32923 1.30946 1.28999 1.27082 1.25194 1.23336 1.21505	1.04290 + 1 1.02737 1.01207 9.97007 + 0 9.67573 9.53194 9.39035 9.25093 9.11364	1.3722h - 2 1.35180 1.33167 1.31185 1.2923h 1.27312 1.25820 1.23557 1.21723 1.19916	2.1478 - 2 2.1149 2.0825 2.0506 2.0192 1.9883 1.9579 1.9280 1.8985	1.7533 - 2 1.7265 1.7000 1.6740 1.6484 1.6231 1.5739 1.5739 1.5548
30000 30100 30200 30300 30400 30500 30600 30700 30800	29859 29958 30057 30156 30255 30354 30453 30552 30651	226.509 226.608 226.707 226.806 226.905 227.004 227.103 227.202 227.301 227.400	46.641 46.542 46.844 46.245 46.146 46.047 45.948 45.849 45.749	226.509 226.608 226.707 226.806 226.905 227.004 227.103 227.202 227.501 227.400	1-19703 + 1 1-17928 1-16180 1-14459 1-12765 1-11096 1-09453 1-07834 1-06241	8.97846 + 0 8.84534 8.71425 8.58517 8.45805 8.33288 8.20962 8.08824 7.96871 7.85099	1.18138 - 2 1.16386 1.14061 1.12963 1.11290 1.09643 1.08021 1.06424 1.04551	1.8410 - 2 1.8129 1.7853 1.7581 1.7313 1.7049 1.6534 1.6534 1.6263	1.5029 - 2 1.4799 1.4574 1.4352 1.4133 1.3918 1.3706 1.3497 1.3292 1.5090
31000 31100 31200 31300 31400 31500 31600 31700 31800 31900	30850 30949 31048 31147 31246 31345 31444 31543 31642 31741	227.500 227.599 227.698 227.797 227.896 227.995 228.094 228.193 228.292 228.391	-45.650 -45.351 -45.452 -45.353 -45.254 -45.155 -45.056 -44.957 -44.858	227.500 227.599 227.698 227.795 227.896 227.995 228.098 228.193 228.292 228.391	1.03126 + 1 1.01004 1.00105 9.86292 + 0 9.71757 9.57442 9.43345 9.29462 9.15789 9.02323	7.73508 + 0 7.62092 7.50851 7.39780 7.28878 7.18141 7.07567 6.97154 6.86899 6.76798	1.01777 - 2 1.00275 9.87962 - 3 9.73395 9.59049 9.84922 9.31009 9.17307 9.03814 8.90524	1.5792 - 2 1.5552 1.5316 1.5383 1.4855 1.4629 1.4408 1.4190 1.3975 1.3763	1-2691 - 2 1-2695 1-2503 1-2513 1-2126 1-1962 1-1761 1-1583 1-168
32000 32200 32400 32600 32800 33000 33200 33400 33600 33800	31840 32038 32236 32434 32632 32830 33027 33027 33225 33423 33621	228, 490 228, 756 229, 310 229, 864 230, 418 230, 973 231, 527 232, 081 232, 635 233, 189	- 44.660 - 44.394 - 43.840 - 43.286 - 42.732 - 42.177 - 41.623 - 41.069 - 40.515 - 39.961	228.490 228.756 229.310 229.864 230.418 230.973 231.527 232.681 232.635 233.189	8.89063 + 0 8.63140 8.38023 8.3696 7.90133 7.67306 7.45196 7.23773 7.03016 6.82902	6.66852 + 0.6-47408 6.28569 6.10322 5.92649 5.75528 5.58943 5.42874 5.27305 5.12219	8.77437 - 3 8.51853 8.27065 8.03056 7.70601 7.57274 7.35451 7.14308 6.93822 6.73972	1.3555 - 2 1.3145 1.2731 1.2332 1.1946 1.1573 1.1213 1.0864 1.0528 1.0202	1-1065 - 2 1-0730 1-0363 1-0067 9-7518 - 3 9-1532 8-8688 8-5939 8-3282
34000 34200 34400 34600 35000 35200 35200 35400 35600 35800	33819 34017 34215 34413 34610 34808 35006 35204 35402 35599	233.743 234.297 234.851 235.405 235.459 236.513 237.067 237.621 236.175 236.729	-39.407 -36.853 -38.299 -37.745 -37.191 -36.637 -36.083 -35.529 -34.975 -34.421	233-743 234-297 234-851 235-405 235-959 236-513 237-067 237-621 238-729	6.63%12 + 0 6.4%522 6.26215 6.08%70 5.91269 5.7%593 5.58%27 5.42752 5.27553 5.12815	h-97600 ← 0 h-83h31 h-65700 h-5388 h-30980 h-1885h h-07097 3-95697 3-95697	6.5%736 - 3 6.3609% 6.18026 6.00513 5.83537 5.67079 5.5112% 5.35655 5.20655 5.20655	9.8874 - 3 9.5832 9.2890 9.0045 8.7294 8.4634 8.2060 7.9571 7.7163 7.4833	8.0713 - 3 7.8230 7.5828 7.3506 7.3506 7.3506 6.9089 6.4986 6.4986 6.4986 6.2990 6.1088
36000 36400 36400 36400 37000 37200 37400 37600 37600	35797 35995 36193 36390 36588 36786 36784 37181 37379 37577	239.282 239.836 240.390 240.943 241.497 242.050 242.604 243.157 243.711 244.264	-33.868 -33.314 -32.760 -32.207 -31.653 -31.100 -30.546 -29.993 -29.439 -28.886	239.282 239.836 240.390 240.943 241.497 242.050 242.604 243.157 243.711	4.98522 + 0 4.84660 4.71214 4.55172 4.3521 4.33248 4.21340 4.29786 3.98575	3-73922 + 0 3-63525 3-5346 3-34658 3-3468 3-24962 3-16031 3-07365 2-98956 2-90796	N. 92003 - 3 N. 78322 N. 65052 N. 52181 N. 39695 N. 27582 N. 15830 N. 0N N. 27 3. 93363 3. 82626	7.2579 - 3 7.0398 6.8287 6.6285 6.4265 6.2355 6.0502 5.8709 5.8974 5.5293	5.9248 - 3 5.7468 5.5745 5.4077 5.2464 5.0902 4.7926 4.6509 4.5137

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TABLE I.—Continued GEOPOTENTIAL ALTITUDE, METRIC UNITS

						E, METRIC				
Altii	tude	T	emperatur	e		Pressure		Den	sity	
H, m	Z, m	т, °К	t,°C	T _M ,°K	P, mb	P, mm Hg	P _o	ρ, kg m ⁻³	<u> </u>	
38000 38400 38400 38600 39000 39000 39400 39400 39800	38229 38431 38633 38836 39038 39241 39443 39646 39848 40051	2 % 5 . 4 5 0 2 % 6 . 0 1 0 2 % 6 . 5 7 0 2 % 7 . 1 3 0 2 % 7 . 6 9 0 2 % 8 . 2 5 0 2 % 8 . 8 1 0 2 % 9 . 3 7 0 2	-27.700 -27.140 -26.580 -26.020 -25.460 -24.900 -24.340 -23.780 -23.220 -22.660	245.450 246.010 246.570 247.130 247.690 248.250 248.810 249.370 249.930 250.490	3.65452 + 0 3.55431 3.45706 3.36268 3.27109 3.18218 3.09589 3.01512 2.93080 2.85185	2.74112 + 0 2.66595 2.59301 2.52222 2.45352 2.38683 2.32211 2.25928 2.19828 2.13906	3.60674 - 3 3.50783 3.4185 3.31871 3.22831 3.14057 3.05541 2.97273 2.89248 2.81456	5.1869 - 3 5.0332 4.8843 4.7402 4.6007 4.4655 4.3347 4.2079 4.0851 3.9662	4.2342 - 3 4.1087 3.9872 3.8696 3.7557 3.6453 3.5385 3.4350 3.3348 3.2377	
#0000 #0200 #0400 #0600 #1000 #1200 #1400 #1600 #1800	40253 40456 40658 40861 41064 41266 41469 41671 41874 42077	251.050 251.610 252.170 252.730 253.290 253.850 254.410 254.970 255.530 256.090	-22.100 -21.540 -20.980 -20.980 -19.860 -19.300 -18.740 -18.740 -17.620 -17.060	251.050 251.610 252.170 252.2730 253.290 253.850 254.410 254.970 255.530 256.090	2.77520 + 0 2.770377 2.62849 2.55830 2.49014 2.42394 2.35964 2.29717 2.23650 2.17755	2.08157 + 0 2.02574 1.97753 1.91889 1.86776 1.81810 1.76987 1.72302 1.67751 1.63330	2.73891 - 3 2.66545 2.59412 2.52485 2.5758 2.39224 2.32878 2.26713 2.20725 2.14908	3.8510 - 3 3.7394 3.6312 3.5264 3.4249 3.3265 3.2311 3.1387 3.0491 2.9622	3.1437 -3 3.0525 2.9643 2.8787 2.7958 2.7755 2.6376 2.5622 2.4890 2.4890	
42000 42400 42400 42600 43600 43600 43400 43600 43800	42279 42482 42685 42887 43090 43293 43496 43698 43901 44104	256.650 257.210 257.770 258.330 258.890 259.850 260.010 260.570 261.130 261.690	-16.500 -15.940 -15.380 -14.820 -14.260 -13.700 -13.140 -12.580 -12.020 -11.460	256.650 257.210 257.770 258.330 258.890 259.450 260.010 260.570 261.130 261.690	2.12028 + 0 2.06464 2.01058 1.95004 1.95009 1.85737 1.80914 1.76227 1.71671 1.67242	1.59034 + 0 1.54861 1.50806 1.46865 1.46865 1.43035 1.39314 1.35697 1.32181 1.28764 1.25442	2.09256 - 3 2.03764 1.98428 1.93243 1.88205 1.83308 1.78548 1.73922 1.69426 1.65055	2.8780 - 3 2.7964 2.7172 2.6405 2.5661 2.4939 2.4239 2.3561 2.2902 2.2264	2.3494 - 3 2.2828 2.2181 2.1555 2.0948 2.0359 1.9787 1.9233 1.8696 1.8174	
44000 44200 44400 44600 45000 45000 45400 45800 45800	14307 14510 14712 14915 15118 15321 15524 15727 15930 16132	262.250 262.810 263.370 263.930 264.490 265.050 265.610 266.170 266.730 267.290	-10.900 -10.340 -9.780 -9.220 -8.660 -8.100 -7.540 -6.980 -5.860	262.250 262.810 263.370 263.930 264.490 265.050 265.610 266.170 266.730 267.290	1.62936 + 0 1.58750 1.54681 1.50723 1.46876 1.43134 1.39495 1.35956 1.32514 1.29166	1:22212 + 0 1:19073 1:16020 1:13052 1:10166 1:07359 1:04630 1:01975 9:93936 - 1 9:68825	1.60806 - 3 1.56674 1.52658 1.48752 1.48755 1.41262 1.37671 1.34178 1.30781	2.1644 - 3 2.1043 2.0460 1.9894 1.9345 1.8813 1.8296 1.7794 1.77307 1.6835	1.7669 - 3 1.7178 1.6702 1.6240 1.5792 1.5357 1.4935 1.4935 1.4128	
46000 46200 46400 46600 47000 47200 47400 47600 47600 47800	46335 46781 46781 46788 47187 47350 47553 47756 47959 48162	267.850 268.410 268.970 269.530 270.090 270.650 270.650 270.650 270.650 270.650	-5.300 -4.740 -4.180 -3.040 -2.500 -2.500 -2.500 -2.500 -2.500	267.850 268.410 268.970 269.530 270.650 270.650 270.650 270.650 270.650	1.25909 + 0. 1.22741 1.19660 1.16661 4.13744 1.10745 1.008141 1.05445 1.00253	9.44393 - 1 9.20636 8.97520 8.75031 8.553150 8.31859 8.11122 7.90901 7.71184 7.51959	1.24263 - 3 1.21136 1.18095 1.15136 1.1257 1.09455 1.06727 1.04066 1.01472 9.89420 - 4	1.6376 - 3 1.5931 1.5498 1.5498 1.4671 1.4275 1.3919 1.3572 1.3234 1.2904	1.3368 - 3 1.3005 1.2652 1.2309 1.1976 1.1653 1.1363 1.1079 1.0803	
#8000 #8400 #8400 #8600 #8600 #9200 #9400 #9400	48368 48771 48974 49178 49181 49384 49787 4990 50193	270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650	-2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500	270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650	9.77537 - 1 9.53168 9.29406 9.06237 8.83645 8.61616 8.40137 8.19193 7.98771 7.78858	7.33213 - 1 7.14935 6.97112 6.79733 6.62788 6.46265 6.30154 6.14445 5.99127 5.84192	9.64754 - 4 9.40704 9.17253 8.94386 6.72090 8.50349 8.29150 8.08480 7.88325 7.68673	1.2582 - 3 1.2269 1.1963 1.1665 1.1374 1.1090 1.0814 1.0584 1.0281	1.0271 - 3 1.0015 9.7656 - 4 9.5222 9.2848 9.0533 8.8276 8.6076 8.3930 8.1838	
50000 50500 51000 51500 52500 52500 53500 54000 54500	50396 50904 51413 51921 52429 52437 53954 54471	270.650 270.650 270.650 270.650 270.650 269.650 269.650 267.650 267.650 266.650	-2.500 -2.500 -2.500 -2.500 -3.500 -3.500 -5.500 -6.500 -7.500	270.650 270.650 270.650 270.650 270.650 269.650 268.650 267.650 268.650	7.59442 - 1 7.12992 6.69383 6.28442 5.90005 5.53853 5.19795 4.87716 4.57507 4.29066	5.69628 - 1 5.34788 5.02079 4.71370 4.42540 4.15424 3.89878 3.65817 3.43158 3.21826	7.49511 - 4 7.03668 6.60630 6.20224 5.82289 5.46610 5.12998 4.81338 4.51524 4.23456	9.7752 - 4 9.1773 8.6160 8.0890 7.59%3 7.155% 6.7%0% 6.3%80 5.9772 5.6267	7.9797 - 4 7.4917 7.0335 6.6033 6.1994 5.8411 5.5023 5.1820 4.8793 4.5932	
55000 55500 56000 56500 57500 57500 58500 58500 59500	55480 55489 56498 57507 57516 58534 59553 60062	264.650 263.650 262.650 261.650 250.650 259.650 258.650 256.650 255.650	-8.500 -9.500 -10.500 -11.500 -12.500 -13.500 -15.500 -16.500 -17.500	264.650 263.650 262.650 261.650 260.650 258.650 258.650 256.650 255.650	\$.02297 - 1 3.77105 3.53404 3.31110 3.101146 2.90435 2.71909 2.54499 2.38143 2.22780	3.017%7 - 1 2.82852 2.65075 2.48353 2.32628 2.17844 2.03948 1.90890 1.78622 1.67099	3.97036 - 4 3.72173 3.48782 3.26780 3.06090 2.86637 2.68353 2.51171 2.35029 2.19867	5.2956 - 4. 4.9828 4.6874 4.4085 4.1452 3.8967 3.6623 3.4411 3.2325 3.0358	4.3229 - 4 4.0676 3.8264 3.5988 3.3838 3.1810 2.9896 2.8090 2.6388 2.4782	

TABLE I.—Continued
GEOMETRIC ALTITUDE, METRIC UNITS

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Alti	tude	Т	emperatur	e e		Pressure		Den	sity
Z, m	H, m	Т,°К	t,°C	T _M ,°K	P, mb	P, mm Hg	<u>P</u> P ₀	ρ, kg m ⁻³	· ρ / ρ / ρ / ρ / ρ / ρ / ρ / ρ / ρ / ρ
38000 38200 38400 38600 38600 39000 39200 39400 39600 39800	37774 37972 38169 38367 38565 38762 38960 39157 39355 39552	244.818 245.371 245.924 246.478 247.031 247.584 248.137 248.690 249.243 249.797	-28.332 -27.779 -27.226 -26.672 -26.119 -25.566 -25.013 -24.460 -23.907 -23.353	244.818 245.371 245.924 246.478 247.031 247.584 248.137 248.690 249.243 249.797	3.77138 + 0 3.66891 3.56945 3.47291 3.37919 3.28821 3.19988 3.11411 3.03084 2.94997	2.82877 + 0. 2.75191 2.67731 2.60489 2.53460 2.46636 2.40011 2.33578 2.27331 2.21266	3.72206 - 3 3.62093 3.52277 3.42749 3.33500 3.24521 3.15803 3.07339 2.99120 2.91139	5.3666 - 3 5.2090 5.0564 4.9086 4.7654 4.6267 4.4924 4.3623 4.2362	4.3809 - 3 4.2522 4.1276 4.0070 3.8901 3.7769 3.6673 3.5610 3.4581 3.3584
40000 40200 40400 40600 41000 41200 41400 41600 41800	39750 39947 40145 40342 40540 40737 40935 41132 41329 41527	250.350 250.903 251.455 252.008 252.561 253.114 253.667 254.220 254.773 255.325	-22.800 -22.247 -21.694 -21.142 -20.589 -20.036 -19.483 -18.377 -17.825	250.350 250.903 251.456 252.008 252.561 253.114 253.667 254.67 254.773 255.325	2.87143 + 0 2.77516 2.72108 2.64913 2.57923 2.51133 2.44536 2.38126 2.31899 2.25847	2.15375 + 0 2.09654 2.09654 1.98701 1.93458 1.88365 1.83417 1.78609 1.73938 1.69399	2.83389 - 3 2.75861 2.50550 2.61448 2.54550 2.47849 2.41338 2.35012 2.28866 2.22894	3.9957 - 3 3.8810 3.7698 3.662T 3.5576 3.4564 3.3583 3.2631 3.1709 3.0815	3.2618 - 3 3.1681 3.0774 2.9894 2.9092 2.8216 2.7415 2.6638 2.5885 2.5155
42000 42200 42400 42600 42800 43200 43200 43400 43600	41724 41922 42119 42316 42514 42711 42908 43106 43303 43500	255.878 256.431 256.983 257.536 258.088 258.641 259.193 259.746 260.298 260.851	-17.272 -16.719 -16.167 -15.614 -15.062 -14.509 -13.957 -13.404 -12.852 -12.299	255.878 256.431 256.983 257.536 258.088 258.641 259.193 259.746 260.298 260.851	2.19967 + 0 2.14252 2.08698 2.03299 1.98052: 1.92951 1.87992 1.883172 1.78485 1.73927	1.64989 + 0 1.60702 1.56536 1.52487 1.48551 1.44725 1.41006 1.37390 1.33875 1.30456	2.17090 - 3 2.11450 2.05969 2.00641 T-95462 1.90428 1.85534 1.80776 1.76151	2.9948 - 3 2.9107 2.8291 2.7500 2.6733 2.5789 2.5267 2.4567 2.3288	2.4447 - 3 2.3761 2.3095 2.2449 2.1823 2.1215 2.0626 2.0055 1.9500 1.8962
44000 44000 44600 44600 45000 45200 45200 45200 45800 45800	43697 43895 44092 44289 44486 44684 44881 45078 45275 45472	261.403 261.955 262.508 263.060 263.612 264.716 265.268 265.820 266.373	-11.747 -11.195 -10.642 -10.090 -9.538 -8.986 -8.434 -7.882 -7.330 -6.777	261.403 261.955 262.508 263.060 263.612 264.164 264.716 265.268 265.820 266.373	1.69496 + 0 1.65187 1.60996 1.56921 1.52957 1.49101 1.45351 1.41702 1.38153 1.34700	1.27133 + 0 1.23900 1.20757 1.17700 1.14727 1.11835 1.09022 1.06286 1.03623 1.01033	1.67280 - 3 1.63027 1.58891 1.58899 1.50957 1.47151 1.43450 1.39849 1.36347 1.32939	2.2589 - 3 2.1968 2.1365 2.0781 2.0214 1.9663 1.9128 1.8609 1.8106	1.8440 - 3 1.7933 1.7441 1.6964 1.6501 1.6051 1.5615 1.5191 1.4780
#6000 #6200 #6400 #6600 #7000 #7200 #7400 #7600 #7800	45867 45867 46064 46261 46458 46655 46852 47049 47246 47443	266.925 267.476 268.028 268.580 269.132 269.684 270.236 270.650 270.650	-6.225 -5.674 -5.122 -4.570 -4.018 -3.466 -2.914 -2.500 -2.500 -2.500	266.925 267.476 268.028 268.580 269.132 269.684 270.236 270.650 270.650	1.31340 + 0 1.28072 1.24891 1.21795 1.18783 1.15851 1.12998 1.10220 1.07512 1.04871	9.85135 - 1 9.60615 9.36756 9.13539 8.90944 8.68954 8.47551 8.26717 8.06409 7.86600	1.29623 - 3 1.26397 1.23257 1.20202 1.17229 1.14336 1.11520 1.08779 1.06106 1.03500	1.7141 - 3 1.6680 1.6233 1.5798 1.5375 1.4965 1.4567 1.4187 1.3838 1.3899	1.3993 - 3 1.3617 1.3251 1.2896 1.2551 1.2216 1.1891 1.1581 1.1297
48000 48200 48400 48600 48600 49000 49200 49400 49600 49800	47640 47837 48034 48231 48428 48625 48822 49019 49216 49413	270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650	-2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500	270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650 270.650	1.02296 + 0 9.97630 - 1 9.73324 9.49422 9.26107 9.03367 8.81186 8.59552 8.36449 8.17867	7.67279 — 1 7.48434 7.30053 7.12125 6.94638 6.77581 6.60944 6.44717 6.28889 6.13450	1.00958 - 3. 9.84782 - 4 9.60597 9.37006 9.13997 8.91554 8.69663 8.48311 8.27485 8.07172	1.3167 - 3 1.2844 1.2528 1.2221 1.1920 1.1628 1.1382 1.1064 1.0792	1.0749 - 3 1.0485 1.0227 9.9759 - 4 9.7310 9.4920 9.2590 9.0316 8.8099 8.5936
50000 50500 51000 51500 52000 52500 53500 53500 54500	49610 50102 50594 51086 51578 52070 52562 53053 53545 54037	270.650 270.650 270.650 270.650 270.650 270.550 209.527 268.583 267.560 266.577	-2.500 -2.500 -2.500 -2.500 -2.500 -2.640 -3.623 -4.607 -5.590 -6.573	270.650 270.650 270.650 270.650 270.650 270.510 269.527 268.543 267.560 266.577	7.07790 - 1 7.49734 7.04580 6.62151 6.22283 5.84821 5.49540 5.16275 4.84917 4.55364	5.98392 - 1 5.62347 5.28478 4.96654 4.66751 4.38651 4.12189 3.87238 3.63718 3.41551	7.87358 - 4 7.39930 6.95366 6.53492 6.14146 5.77173 5.42353 5.09524 4.78576 4.49409	1.0269 - 3 9.6502 - 4 9.0690 8.5229 8.0097 7.5314 7.1029 6.6974 6.3137 5.9508	8.3827 - 4 7.8777 7.4033 6.9575 6.5586 6.1481 5.7983 5.4673 5.1541 4.8578
55000 55500 54000 54500 57000 57500 58500 58500 59500 59500	54528 55020 55511 56002 56493 56494 57476 57466 58457 58948	265-59h 26h-611 263-628 262-6h6 261-663 260-681 259-699 258-717 257-735 256-754	-7.556 -8.539 -9.522 -10.504 -11.487 -12.469 -13.451 -14.433 -15.415 -16.396	265.594 264.611 263.628 262.646 261.663 260.681 259.699 258.717 257.735 256.754	4.27516 - 1 4.01282 3.76572 3.53304 3.31397 3.10777 2.91373 2.73116 2.55942 2.39792	3.20664 - 1 3.00986 2.82452 2.65000 2.48568 2.33102 2.18548 2.04854 1.91972 1.79858	4.21926 - 4 3.96034 3.71648 3.48684 3.27064 3.06713 2.87563 2.69544 2.52595 2.36656	5.6075 - 4 5.2830 4.9762 4.6862 4.4121 4.1532 3.9086 3.6776 3.4594 3.2535	4.5776 - 4.4.3126 4.0622 3.8254 3.6017 3.3903 3.1907 3.0021 2.8240 2.6559

TABLE I.—Concluded GEOPOTENTIAL ALTITUDE, METRIC UNITS

Álti	tude	·	Temperature			Pressure		Den	sity
Н, т	Z, m	τ̈́,°κ	*t,20	T _M ,°K	P, mb	P, mm Hg	P P _o	ρ, kg. m ⁻³	Po
60000 60500 61000 61500 62000 62500 63500 64000 64500	60572 61081 61591 62101 62611 63121 63631 64141 64651 65161	254.650 253.650 252.650 250.650 248.650 246.650 244.650 240.650 240.650	-18.500 -19.500 -20.500 -22.500 -24.500 -26.500 -28.500 -32.500 -34.500	254.050 253.650 250.650 250.650 248.650 246.650 244.650 240.650 238.650	2.08354 - 1 1.94810 1.92099 1.70148 1.58896 1.48305 1.38343 1.22976 1.20174 1.11906	1.56278 - 1 1.46120: 1.36585 1.27622 1.19182 1.11238 1.03766 9.67402 - 2 9.01379 8.39367	2.05529 - 4 1.92263 1.79718 1.67923 1.56818 1.46366 1.36534 1.27290 1.18603 1.10443	2.8503 - 4 2.6756 2.5109 2.3648 2.2262 2.0947 1.9699 1.8517 F.7397	2.3268 - 4 2.1841 2.0497 1.9305 1.8173 1.7099 1.6081 1.5116 1.4201 1.3335
65000 65500 66000 66500 67000 68500 68500 69000 69500	65672 66182 66693 67203 67714 68225 68735 69246 69757 70268	236.650 234.650 232.650 230.650 228.650 226.650 224.650 222.650 220.650 218.650	~36.500 ~38.500 ~40.500 ~42.500 ~46.500 ~46.500 ~50.500 ~50.500 ~54.500	236.650 234.650 232.650 230.650 228.650 226.650 224.650 224.650 220.650 218.650	1.04145 - 1 9.68630 - 2 9.00342 8.36340 7.76389 7.20265 6.18651 5.72765 5.29910	7.81153 - 2 7.26533 6.75312 6.27307 5.82340 5.00243 5.00856 4.64027 4.29609 3.97465	1.02783 - 4 9.55964 - 5 8.88569 8.25404 7.66237 7.10846 6.59021 6.10561 5.65275 5.22981	1.5331 - 4 : 1.4381 1.3482 1.2632 1.1627 1.1027 1.0355 9.6797 - 5 9.0430 8.4429	1.2515 - 4 1.1739 1.1005 1.0312 9.6563 - 5 9.0373 8.4530 7.9018 7.3820 6.8922
70000 70500 71000 71500 72000 72500 73500 74000 74500	70780 71291 71802 72314 72825 73337 73848 74360 74872 75384	216.650 214.650 212.650 210.650 208.650 206.650 204.650 202.650 198.650	-56.500 -58.500 -60.500 -62.500 -64.500 -68.500 -70.500 -72.500 -74.500	216-650 214-650 212-650 210-650 208-650 206-650 204-650 202-650 198-650	4.89912 - 2 4.52603 4.17825 3.855428 3.555270 3.27214 3.01133 2.764015 2.33552	3.67464 - 2 3.39480 3.13395 2.89095 2.66474 2.45431 2.25869 2.07696 1.90827 1.75179	4.83505 - 5 4.46684 4.12361 3.80388 3.50624 3.22935 2.97196 2.73284 2.51088 2.30498	7.8777 - 5 7.3456 6.8449 6.3741 5.9317 5.5161 5.1261 4.7602 4.4171 4.0958	6.4307 - 5 5.9964 5.5877 5.2034 4.8422 4.5030 4.1846 3.8859 3.6058 3.3435
75000 75500 76000 76500 77000 77500 78500 78500 79000 79500	75896 76408 76920 77432 77944 78457 78969 79482 79994 80507	196.65 194.65 192.65 190.65 188.65 186.65 184.65 182.65 180.65	-76.50 -78.50 -80.50 -82.50 -84.50 -86.50 -70.50 -92.50	196.65 194.65 192.65 190.65 188.65 184.65 184.65 182.65 180.65	2.1422 - 2 1.9631 1.7973 1.6441 1.5024 1.3717 1.2511 1.1400 1.0377 9.4407 - 3	1.6067 - 2 1.4724 1.3481 1.2331 1.1269 1.0289 9.3843 - 3 8.5508 7.7834 7.0811	2.1141 - 5 1.9374 1.7736 1.6226 1.4826 1.3530 1.2348 1.1251 1.02241 9.3173 - 6	3.795 - 5 3.513 3.253 3.004 2.774 2.560 2.360 2.174 2.001 1.821	3.098 - 5 2.868 2.653 2.452 2.265 2.090 1.927 1.775 1.634 1.486
80000 80500 81000 81500 82000 82500 83500 84000 84500	81020 81533 82046 92559 83072 83585 84098 84612 85125 85639	180.65 180.65 180.65 180.65 180.65 180.65 180.65 180.65	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	180.65 180.65 180.65 180.65 180.65 180.65 180.65 180.65	8.5890 - 3 7.8140 7.1090 6.4676 5.8841 5.3532 4.8702 4.8308 4.0310 3.6674	6.4422 - 3 5.8610 5.3322 4.8511 4.4134 4.0152 3.6530 3.3234 3.0235 2.7507	8.4766 - 6 7.7118 7.0161 6.3830 5.8071 5.2832 4.8065 4.3729 3.9783 3.6194	1.656 - 5 1.507 1.371 1.247 1.135 1.032 9.392 - 6 8.544 7.774 7.072	1.352 - 5 1.230 1.119 1.018 9.263 - 6 8.427 7.667 6.975 6.346 5.773
85000 85500 86000 86500 87000 87500 88000 88500 89000 89500	86152 86666 87180 87693 88207 88721 89236 89750 90264 90778	180.65 180.65 180.65 180.65 180.65 180.65 180.65 180.65 181.44 182.97	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -91.71 -90.18	180.65 180.65 180.65 180.65 180.65 180.65 180.65 180.65	3.3365 - 3 3.0354 2.7616 2.5124 2.2857 2.0795 1.8919 1.7212 1.5661 1.4259	2.5026 - 3 2.2768 2.0714 1.8845 1.7144 1.5598 1.4190 1.2910 1.1746 1.0695	3.2928 - 6 2.9957 2.7255 2.4796 2.2558 2.0523 1.8671 1.6987 1.5456 1.4073	6.83% - 6 5.85% 4.845 4.008 4.010 3.648 3.319 3.007 2.715	5.252 - 6 4.778 4.347 3.955 3.598 3.274 2.978 2.710 2.455 2.216
90000	91293	184.51	-88.6h	184.53	1.2994 - 3	9.7459 — 4	1.2824 - 6	2.453 - 6	2.002 - 6
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TABLE I.—Continued
GEOMETRIC ALTITUDE, METRIC UNITS

Altit	ude	7	emperatur	e		Pressure	. 2	Den	sity
Z, m	H, m	T,ºK	t ,° C	T _M , °K	P, mb	P, mm Hg	<u>P</u> P°	ρ, kg m ⁻³	<u>P</u>
60000 60500 61000 61500 62500 62500 63500 64500 64500	59439 59930 60420 60911 61401 61891 62382 63362 63362 63852	255.772 254.791 253.810 252.829 251.046 249.084 247.123 245.163 243.202 241.242	-17.378 -18.359 -19.340 -20.321 -22.104 -24.066 -26.027 -27.987 -29.948 -31.908	255.772 254.791 253.810 252.829 251.046 249.084 247.123 245.163 243.202 241.242	2.24606 - 1 2.10332 1.96917 1.84312 1.72457 1.61283 1.50754 1.40838 1.31504 1.22722	1.68469 - 1 1.57762 1.47700 1.38246 1.29353 1.20972 1.13075 1.05637 9.86364 - 2 9.20492	2.21669 3 4 2.07582 1.94342 1.81902 1.70202 1.59174 1.48783 1.38997 1.29785 1.21117	5.0592 - 4 2.8758 2.7028 2.5396 2.3931 2.2557 2.1252 2.0013 1.8837 1.7722	2-4975 - 4 2-3476 2-2064 2-0731 1-9536 1-8414 1-7348 1-6337 1-5377
65000 65500 66000 66500 67500 67500 68500 69000 69500	64342 64832 65322 65811 66301 66791 67280 67770 68259 68748	239.282 237.323 235.363 233.404 229.487 227.529 225.572 223.614 221.657	-33.868 -35.827 -37.787 -37.787 -39.786 -43.663 -45.663 -45.621 -47.578 -49.536 -51.493	239.282 237.323 235.363 233.404 231.446 229.487 227.529 225.572 223.614 221.657	1.14463 ~ 1 1.06700 9.94067 ~ 2 9.25581 8.61305 8.01011 7.44483 6.91514 6.41909 5.95479	8:58545 - 2: 8:00317 7:455612 6:94243: 6:46032 6:00807 5:58408 5:18678 4:81471	1.12966 - 4 1.05305 9.81068 - 5 9.13478 8.50042 7.90536 7.34747 6.82472 6.33515 5.87692	1.6465 - 4 1.5663 1.4713 1.3815 1.2964 1.2160 1.1399 1.0680 1.0000 9.3589 - 5	1.3604 - 4. 1.2786 1.2011 1.1277 1.0563 9.9262 - 5 9.3051 8.7180 2.1635 7.6399
70000 70500 71000 71500 72500 72500 73500 74500 74500	69237 69727 70216 70705 71193 71682 72171 72660 73148 73637	219.700 217.744 215.788 213.832 211.876 209.921 207.966 206.011 204.057 202.103	-53.450 -55.406 -57.362 -59.318 -61.274 -63.229 -65.184 -67.139 -69.093 -71.047	217.744 215.788 213.832 211.876 209.921 207.966 206.011 204.057 202.103	5.52047 ~ 2 5.11441 4.73502 4.38075 4.05013 3.74179 3.45441 3.18673 2.93758 2.70581	4.14069 - 2 3.83613 3.55156 3.28583 3.03785 2.80658 2.59102 2.39025 2.20336 2.02953	5.44828 - 5 5.04753 4.677310 4.32346 3.99717 3.69286 3.40924 3.140924 2.89916 2.67043	8.7535 - 5 8.1825 7.6442 7.1370 6.6593 6.2096 5.7866 5.3888 5.0151	7.1457 - 5 6.6796 6.2402 5.8261 5.4361 5.0691 4.7237 4.3990 4.0939 3.8074
75000 75500 76000 76500 77500 77500 78500 78500 79000 79500	74125 74614 75102 75590 76078 76566 77054 77542 78030 78518	200.15 198.20 196.24 194.29 192.34 190.38 186.43 186.48 184.53	-73.00 -74.95 -76.91 -78.86 -80.81 -82.77 -84.72 -86.67 -88.62 -90.57	200 - 15 198 - 20 196 - 24 194 - 29 194 - 29 190 - 38 186 - 43 186 - 48 184 - 53 182 - 58	2.4904 - 2. 2.2903 - 2. 2.1045 1.9322 1.7725 1.6246 1.4877 1.3611 1.2442 1.1362	1.8679 - 2 1.7178 1.5785 1.4493 1.3295 1.2186 1.1159 1.0209 9.3322 - 3	2.4578 - 5 2.2603 2.0770 1.9069 1.7493 1.6034 1.4683 1.3433 1.2279	4.335 - 5 4.026 3.736 3.465 3.210 2.973 2.750 2.583 2.389 2.168	3.538 - 5 3.286 3.050 2.828 2.621 2.427 2.245 2.076 1.917
80000 80500 81000 61500 82000 82500 83500 84500	79006 79493 79981 80468 80956 81443 81930 82417 82904	180.65 180.65 180.65 180.65 180.65 180.65 180.65 180.65 180.65	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	180.65 180.65 180.65 180.65 180.65 180.65 180.65 180.65	1:0366 - 2 9.4530 - 3 8.6204 7.8612 7.1691 6.5379 5.9624 5.4377 4.9592 4.5228	7.7752 - 3 7.0903 6.4658 5.8964 5.3772 4.9038 4.4722 4.0786 3.7197 3.3924	1.0231 - 5 9.3293 - 6 8.5076 - 7 7.7584 - 7.0753 - 6 45524 - 5.8845 - 6 5.8845 - 6 5.8943 - 4.4637	1.999 - 5 1.023 1.662 1.516 1.302 1.261 1.150 1.049 9.563 - 6	1.632 - 5 1.488 1.357 1.238 1.129 1.029 9.386 - 6 8.560 7.807 7.120
85000 85500 86500 87500 87500 88500 88500 88500 89500	83878 84365 84852 85339 85825 86312 86798 87285 87771	180.65 180.65 180.65 180.65 180.65 180.65 180.65 180.65	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	180.65 180.65 180.65 180.65 180.65 180.65 180.65 180.65	4.1250 - 3 3.7621 3.4313 3.1295 2.8544 2.6035 2.3746 2.1660 1.9756 1.8021	3.0940 - 3 2.8218 2.5737 2.3474 2.1410 1.9528 1.7811 1.6246 1.4819 1.3517	4.0710 - 6 3.7129 3.3864 3.0866 2.8171 2.5694 2.3436 2.1376 1.9498	7.955 - 6 7.255 6.617 6.035 5.504 5.021 4.579 4.177 3.810 3.475	6.494 - 6 5.922 5.402 4.927 4.993 4.098 3.738 3.410 3.110 2.837
90000	88743	180.65	-92.50	180.65	1.6438 - 3	1.2329 - 3	1.6223 - 6	3.170 ₍₎ - 6.	2,588 - 6
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TABLE I.—Continued
GEOMETRIC ALTITUDE, METRIC UNITS

ΛÌH	tude	-	Comporatur		,	Proceure		Don	city
AIII	Luue.		emperatur	L		Pressure	•	Den	
Z, m	H, m	T,°K	t _s °C	T _M ,°K	P, mb	P, mm Hg	P _o	. ρ΄, :kg; m ⁻³	ρ/ρο
90000 90500 91000 91500 92000 92500 93500 94000 94500	88743 89229 89715 90201 90687 91173 91659 92144 92630 93116	180-65 182-14 183-63 185-13 186-62 188-10 189-59 191-08 192-56	-92.50 -91.01 -89.52 -88.02 -86.53 -85.05 -83.56 -82.07 -80.59 -79.11	180.65 182.15 183.65 185.15 186.65 188.15 189.65 191.15 192.65	1.6438 - 3 1.5000 1.3698 1.2519 1.1449 1.0479 9.5977 - 4 8.7968 8.0683 7.4052	1.2329 - 3 1.1251. 1.0274 9.3898 - 4 8.5877 7.8599 7.1989 6.5981 6.0517 5.5544	1.6223 - 6 1.4804 1.3519 1.2355 1.1300 1.0342 - 7 8.6818 7.9628 7.3084	3.170 - 6 2.869 2.598 2.355 2.137 1.940 1.763 1.403 1.459 1.329	2.588 - 6 2.542 2.121 1.923 1.744 1.584 1.439 1.309 1.191 1.085
95000 95500 96000 96500 97500 97500 98500 99500	93601 94086 94572 95057 95542 96027 96512 96997 97482 97966	195.51 196.98 198.45 199.92 201.37 202.83 204.28 205.72 207.16	-77.64 -76.17 -74.70 -73.23 -71.78 -70.32 -68.87 -67.43 -65.99 -64.55	195.65 197.15 198.65 200.15 201.65 203.15 204.65 206.15 207.65 209.15	6.8012 - 4 6.2506 5.7483 5.2897 4.8709 4.4880 4.1377 3.8171 3.5235 3.2543	5.1013 - 4 4.6883 4.3116 3.9676 3.6535 3.3663 3.1036 2.8631 2.6428 2.4409	6.7122 - 7 6.1688 5.6731 5.2206 4.8072 4.4293 4.0836 3.7672 3.4774 3.2117	1.211 - 6 1.104 1.008 9.207 - 7 8.415 7.696 7.044 6.450 5.911 5.420	9.886 - 7 9.016 8.229 7.516 6.869 6.283 5.750 5.266 4.825 4.425
100000 101000 102000 103000 104000 105000 106000 107000 108000	98451 99420 100389 101357 102326 103294 104261 105228 106195 107162	210.02 214.86 219.66 224.43 229.18 233.90 238.58 243.23 247.85 252.44	-63.13 -58.29 -53.49 -48.72 -43.97 -39.25 -34.57 -29.92 -25.30 -20.71	210.65 215.65 220.65 225.65 230.65 235.65 240.65 245.65 250.65	3.0075 - 4 2.5748 2.2123 1.9074 1.6500 1.4318 1.2462 1.0879 9.5225 - 5 8.3578	2.2558 - 4 1.9312 1.6594 1.4307 1.2376 1.0739 9.3475 - 5 8.1596 7.1425	2.9681 - 7 2.5411 2.1834 1.8825 1.6284 1.4131 1.2299 1.0736 9.3980 - 8 8.2485	4.974 - 7 4.159 3.493 2.985 2.492 2.117 1.804 1.543 1.323	4.060 - 7 3.395 - 2.851 2.404 2.034 1.73 1.473 1.259 1.080 9.297 - 8
110000 111000 112000 113000 114000 115000 116000 117000 118000	108129 109095 110060 111026 111991 112956 113921 114885 115849 116813	257.00 266.44 275.85 285.20 294.52 303.78 313.01 322.19 331.33 340.43	-16.15 -6.71 2.70 12.05 21.37 30.63 39.86 49.04 58.18 67.28	260.65 270.65 280.65 290.65 300.65 310.65 320.65 340.65 350.65	7.3544 - 5 6.4951 5.7623 5.1338 4.5919 4.1224 3.7137 3.3563 3.0426 2.7662	5.5163 - 5 4.8717 4.3220 5.8507 3.4442 2.7855 2.5175 2.2822 2.0748	7.2582 - 8 6.4101 5.6869 5.0866 4.5319 4.0685 3.6651 3.3125 3.0029 2.7300	9.829 - 8 8.360 7.153 6.153 5.321 4.623 4.035 3.536 3.112 2.748	8.024 - 8 6.825 5.839 5.023 4.343 3.774 3.294 2.887 2.540 2.243
120000 121000 122030 123000 124000 125000 126000 127000 128000 129000	117776 118739 119702 120665 121627 122589 123551 124512. 125473 126434	349.49 368.19 386.83 405.40 423.90 442.35 460.73 479.07 497.36 515.60	76.34 95.04 113.68 132.25 150.75 169.20 187.58 205.92 224.21 242.45	360-65 380-65 400-65 420-65 440-65 460-65 500-65 520-65 540-65	2.5217 - 5 2.3074 2.1210 1.9578 1.0139 1.6863 1.5726 1.4707 1.3791	1.8914 - 5 1.7307 1.5909 1.4684 1.3605 1.2648 1.1795 1.1031 1.0344 9.7239 - 6	2.4887 - 8 2.2772 2.0933 1.9322 1.7901 1.6642 1.5520 1.4515 1.3611 1.2795	2.436 - 8 2.112 1.844 1.421 1.434 1.275 1.140 1.023 9.228 - 9 8.353	1.988 - 8 1.724 1.506 1.324 1.171 1.041 9.304 - 9 8.354 7.533 6.819
130000 131000 132000 133000 134000 136000 137000 138000 139000	127394 128354 129314 130274 131233 132192 133151 134109 135067 136025	533.80 551.97 570.09 588.19 606.26 624.30 642.32 660.32 678.31 696.27	260.65 278.82 296.94 315.04 333.11 351.15 369.17 387.17 405.16 423.12	560.65 580.65 600.65 640.65 640.65 680.65 700.65 720.65 740.65	1.2214 - 5 1.1532 1.0909 1.0339 9.8151 - 6 9.3330 8.8882 8.4766 8.0950 7.7405	9.1613 - 6 8.6495 8.1823 7.7546 7.3619 7.0004 6.6667 6.3580 6.0718 5.8058	1.2054 - 8 1.1381 1.0766 1.0203 9.6867 - 9 9.2110 6.7719 8.3658 7.9892 7.6393	7-589 - 9 6-919- 6-327 5-863 5-337 4-921 4-549- 4-215 3-913 3-641	6.195 - 9 5.648 5.165 4.737 4.357 4.017 3.714 3.441 3.441 2.972
140000 141000 142000 143000 145000 145000 145000 145000 149000	136983 137940 138897 139853 140810 141766 142721 143677 144632 145587	714.22 732.16 750.08 767.98 785.87 803.74 821.60 839.43 857.24 875.03	441.07 459.01 476.93 494.83 512.72 530.59 548.45 566.28 584.09 601.88	760.65 780.65 800.65 820.65 840.65 860.65 900.65 920.65	7.4104 - 6 7.1025 6.8148 6.5455 6.2931 6.0560 5.8331 5.6232 5.4252	5.5582 - 6 5.3273 5.1115 4.9095 4.7202 4.5424 4.3752 4.2177 4.0693	7.3135 - 9 7.0096 6.7257 6.4599 6.2108 5.9768 5.7568 5.5496 5.3543 5.1699	3.394 - 9 3.170 2.985 2.779 2.608 2.451 2.307 2.175 2.053	2.770 - 9 2.587 2.421 2.268 2.129 2.001 1.884 1.776 1.584
150000 151000 152000 153000 154000 155000 156000 157000 159000	146541 147496 148450 149403 150357 151310 152263 153215 154167 155119	892.79 905.88 918.94 931.97 944.98 957.94 970.88 983.78 996.64 1009.45	619.64 632.73 645.79 658.82 671.83 684.79 697.73 710.63 723.49 736.30	960.65 975.63 990.65 1005.65 1020.65 1035.65 1050.65 1065.65 1080.65 1095.65	5.0617 - 6 4.8941 4.7345 4.5825 4.4375 4.2992 4.1671 4.0409 3.9202 3.8048	3.7966 - 6 3.6709 3.5512 3.3284 3.3284 3.2246 3.1256 3.0309 2.9404 2.8538	4.9955 - 9 4.8301 4.6726 4.5225 4.3795 4.2429 4.1126 3.9880 3.8690 3.7550	1.836 - 9 1.747 1.665 1.587 1.515 1.446 1.382 1.321 1.264 1.210	1.498 - 9 1.277 1.359 1.296 1.236 1.181 1.128 1.078 1.032 9.876 -10

TABLE I.—Continued
GEOMETRIC ALTITUDE, METRIC UNITS

Altitude		7	Temperatur	e	12.5	Pressure	<u>, 24.3°-7</u>	Den	sity
Z, m	H, m	T,°K	t₁,°C	T _M ,°K	P, mb	P, mm Hg	P Po	ρ, kg m ⁻³	$\frac{\rho}{\rho_{\rm o}}$
160000 161000 162000 163000 164000 166000 166000 168000 169000	156071 157022 157973 158924 159874 160825 161775 162724 163673 164622	1022-23 1030-37 1038-49 1046-59 1054-67 1062-74 1070-81 1078-90 1087-01 1095-17	749.08 757.22 765.34 773.44 781.52 789.59 797.66 805.75 813.86 822.02	1110.65 1120.65 1130.65 1140.65 1150.65 1160.65 1170.65 1190.65	3.6943 - 6. 3.5882: 3.4861 3.3878 3.2932: 3.2019 3.1140 3.0293. 2.9475 2.8687	2.7709 - 6 2.6914 2.6148 2.5411 2.4701 2.4017 2.3357 2.2721 2.2108 2.1517	3.6460 - 9 3.5413 3.4405 3.3435 3.2501 3.1601 3.0733 2.9897 2.9090 2.8312	1.159 - 9 1.115 1.074 1.035 9.970 -10 9.611 9.267 8.938 8.624 8.323	9.459 -10 9.106 8.768 8.446 8.139 7.845 7.565 7.297 7.040 6.795
170000 171000 172000 173000 174000 175000 176000 177000 178000	165571 166520 167468 168416 169363 170310 171257 172204 173150 174097	1105.51 1110.62 1115.73 1120.82 1125.90 1130.97 1136.02 1141.07 1146.10 1151.12	832.36 837.47 842.58 847.67 852.75 857.82 862.87 867.92 877.97	1210.65 1217.65 1224.65 1231.65 1231.65 1245.65 1252.65 1252.65 1259.65 1266.65	2.7926 - 6 2.7191 2.6479 2.5790 2.5123 2.4477 2.3851 2.3245 2.2657 2.2088	2.0946 - 6 2.0395 1.9861 1.9344 1.8859 1.7890 1.7435 1.6994	2.7561 - 9 2.6835 2.6133 2.5153 2.4794 2.4157 2.3539 2.2941 2.2361 2.1799	8.036 -10 7.779 7.532 7.295 7.066 6.845 6.633 6.429 6.231 6.041	6.560 -10 6.350 6.149 5.955 5.768 5.588 5.415 5.246 5.087 4.932
180000 181000 182000 183000 184000 185000 186000 187000 189000	175042 175988 176933 177878 178823 179767 180711 181655 182598 183542	1156.12 1161.12 1166.10 1171.07 1176.03 1180.97 1185.90 1190.82 1195.73 1200.62	882.97 887.97 892.95 897.92 902.88 907.82 912.75 917.67 922.58 927.47	1280.65 1287.65 1294.65 1301.65 1301.65 1315.65 1315.65 1322.65 1329.65 1336.65	2.1536 6 2.1001 2.0482 1.9979 1.9491 1.9018 1.8559 1.8113 1.7680	1.6153 - 6 1.5752 1.5363 1.4986 1.4620 1.4265 1.3920 1.3586 1.3261 1.2946	2.1254 - 9 2.0726 2.0214 1.9718 1.9726 1.8769 1.8316 1.7876 1.7449 1.7034	5.858 ~10 5.682 5.511 5.317 5.189 5.036 4.888 4.746 4.608 4.475	4.782 -10 4.638 4.499 4.365 4.236 4.111 3.990 3.874 3.762 3.653
190000 191000 192000 193000 194000 195000 196000 197000 198000	184485 185427 186370 187312 188253 189195 190136 191077 192018 192958	1205.50 1208.59 1211.66 1214.73 1217.79 1220.84 1223.88 1226.91 1229.93 1232.95	932.35 935.44 938.51 941.58 944.64 947.69 950.73 953.76 956.78 959.80	1350.65 1355.65 1360.65 1365.65 1370.65 1375.65 1380.65 1390.65	1.6852 - 6 1.6456 1.6070 1.5695 1.5331 1.4976 1.4630 1.4294 1.3967	1.2640 - 6 1.2343 1.2054 1.1773 1.1499 1.1233 1.0974 1.0722 1.0476	1.6632 - 9 1.6241 1.5860 1.5890 1.5130 1.4780 1.4439 1.4107 1.3785 1.3470	4.347 ~10 4.229 4.115 4.004 3.896 3.792 3.692 3.594 3.499 3.407	3.548 -10 3.452 3.359 3.268 3.181 3.096 3.014 2.934 2.856 2.781
200000 201000 202000 203000 204000 205000 206000 207000 209000	193898 194838 195777 196716 197655 198594 199532 200470 201408 202346	1235.95 1238.95 1241.94 1244.91 1247.88 1250.84 1253.79 1256.73 1259.66 1262.58	962.80 965.80 968.79 971.76 971.69 980.64 983.58 986.51 989.43	1400.45 1405.65 1410.65 1415.65 1425.65 1425.65 1430.65 1445.65	1.3339 - 6 1.3037 1.27457 1.2457 1.2179 1.1907 1.1643 1.1386 1.1135 1.0890	1.0005 - 6 9.7786 - 7 9.5583 9.3437 9.1347 8.9312 8.7330 8.5398 8.3517 8.1684	1.3164 - 9 1.2867 1.2294 1.2294 1.2019 1.1752 1.1491 1.1237 1.0788	3.318 -10 3.231 3.147 3.066 2.986 2.910 2.835 2.763 2.693 2.693	2-70810 2-638 2-569 2-502 2-438 2-375 2-314 2-255 2-198 2-142
210000 211000 212000 213000 214000 215000 216000 217000 218000 219000	203283 204220 205156 205093 207029 207964 208900 209835 210770 211705	1265.49 1268.40 1271.29 1274.17 1277.05 1279.91 1262.76 1265.61 1268.45 1291.27	992.34 995.25 998.14 1001:02 1003.70 1006.76 1009.61 1012.46 1015.30 1018.12	1450.65 1455.65 1460.65 1465.65 1475.65 1480.65 1485.65 1495.65	1.0652 - 6 1.0420 1.0194 9.9735 - 7 9.7586 9.5491 9.3449 9.1457 8.9515 8.7621	7.9898 - 7 7.8157 7.4861 7.4807 7.3196 7.1024 7.1092 6.8599 6.7142 6.5721	1.0513 - 9 1.0284 1.0061 9.8431 -10 9.6310 9.4242 9.2227 9.0261 8.8345	2.558 -10 2.494 2.431 2.371 2.312 2.254 2.199 2.145 2.092 2.041	2.088 -10 2.036 1.985 1.935 1.887 1.840 1.795 1.751 1.708
220000 221000 222000 223000 224000 225000 226000 227000 228000 229000	212639 213573 214507 215440 216374 217306 218239 219171 220104 221035	1294.09 1296.89 1299.69 1302.47 1305.25 1308.02 1310.77 1313.52 1316.26 1318.99	1020-94 1023-74 1026-54 1029-32 1032-10 1034-87 1037-62 1040-37 1043-11	1500.65 1505.65 1510.65 1512.65 1525.65 1525.65 1530.65 1545.65 1545.65	8.5774 - 7 8.3973 8.2215 8.0500 7.8827 7.7195 7.502 7.4048 7.2531 7.1050	6.4336 - 7 6.2985 6.1666 6.0380 5.9125 5.7901 5.6706 5.5540 5.48402 5.3292	8.4653 -10 8.2874 8.1148 7.9448 7.7797 7.6186 7.4614 7.3080 7.1582 7.0121	1.991 -10 1.943 1.896 1.850 1.806 1.763 1.721 1.680 1.640	1.625 -10 1.586 1.548 1.510 1.474 1.439 1.405 1.371 1.339 1.307
230000 231000 232000 233000 234000 235000 236000 237000 238000 239000	221967 222898 223829 224760 225690 227550 228479 229409 230338	1321.70 1323.56 1325.41 1327.25 1329.08 1330.90 1332.72 1334.52 1336.32	1048.55 1050.41 1052.26 1054.10 1055.93 1057.75 1059.57 1061.37 1063.17	1550.65 1554.65 1558.65 1562.65 1560.65 1570.65 1574.65 1578.65 1582.65	6.9604 - 7 6.8193 6.6813 6.5466 6.4150 6.2863 6.1606 6.0378 5.9177 5.8004	5.2207 - 7 5.1149 5.0114 4.9104 4.8116 4.7151 4.6208 4.5287 4.4387 4.3507	6.8694 -10 6.7301 6.5940 6.4610 6.3311 6.2041 6.0801 5.9588 5.8403 5.7245	1.564 -10 1.528 1.493 1.459 1.459 1.394 1.363 1.332 1.303	1.277 -10 1.247 1.219 1.191 1.164 1.138 1.113 1.088 1.063

TABLE I.—Continued
GEOMETRIC ALTITUDE, METRIC UNITS

Alti	Altitude Temperature				Pressure		Den	sity	
Z, m	H, m	Ţ,°K	t,°C	T _M ,°K	P, mb	P, mm Hg	<u>P</u> P ₀	ρ, kg m ⁻³	<u>ρ</u> Ρ _ο
240000 241000 242000 243000 243000 245000 245000 247000 248000 249000	231266 232195 233123 234051 234978 235905 236832 237759 238686 239612	1339.90 1341.67 1343.44 1345.20 1346.95 1346.95 1350.42 1352.15 1353.87 1355.58	1066.75 1068.52 1070.29 1072.05 1073.80 1075.54 1077.27 1079.00 1080.72 1082.43	1590.65 1594.55 1598.65 1602.65 1610.65 1610.65 1614.65 1618.65 1622.65 1626.65	5.6857 - 7 5.5736 5.4640 5.3569 5.2521 5.1497 5.0496 4.9516 4.8559 4.7622	4-2646 - 7 4-1805 4-0983 4-0180 3-9394 3-8626 3-7875 3-7140 3-6422 3-5720	5-6114 -10 5-5007 5-3926 5-2868 5-1834 5-0824 4-9835 4-8869 4-7924 4-6999	1.245 -10 3.218 1.191 1.164 1.139 1.114 1.089 1.066 1.0043	1.017 -10 9.940 -1.1 9.720 9.505 9.296 9.092 8.894 8.700 8.510 8.326
250000 251000 252000 253000 254000 255000 256000 257000 258000 259000	240538 241463 242389 243314 244238 245163 245087 246087 247011 247934 248858	1357.28 1358.97 1360.66 1362.33 1364.00 1365.66 1367.31 1368.96 1370.59 1372.22	1084.13 1085.82 1087.51 1087.51 1099.85 1092.51 1094.16 1095.81 1097.44 1099.07	1630.65 1634.65 1638.65 1646.65 1646.65 1650.65 1658.65 1658.65 1662.65	h.6706 - 7 h.5810 h.h93h h.4077. h.3238 h.2418 h.1615. b.0830 h.0061 3.9309	3-5032 - 7 3-4361 3-3703 3-3060 3-2431 3-1816 3-1214 3-0625 3-0048 2-9484	4-6095 -10 4-5211 4-5346 4-3500 4-2673 4-1863 4-1071 4-0296 3-9537 3-8795	9.978 -11 9.763 9.553 9.358 9.148 8.952 8.762 8.762 8.575 8.394 8.217	8.145 -11 7.970 7.798 7.631 7.467 7.308 7.152 7.000 6.852 6.707
260000 261000 262000 263000 265000 265000 267000 268000 269000	249781 250704 251626 252548 253470 254392 255313 256235 257155 258076	1373.84 1375.45 1377.06 1378.65 1380.24 -1381.82 1383.39 1384.95 1386.50	1100.69 1102.30 1103.91 1105.50 1107.69 1108.67 1110.24 1111.80 1113.35	1670.65 1674.65 1678.65 1682.65 1682.65 1690.65 1694.65 1694.65 1702.65	3.8573 - 7 3.7853 3.7148 3.6458 3.5783 3.5122 3.4475 3.3841 3.3221 3.2614	2.8932 - 7 2.8392 - 7 2.7863 2.7346 2.6839 2.6384 2.5858 2.5383 2.4918 2.4462	3.8069 -10 3.7358 3.6662 3.5981 3.5315 3.4663 3.4064 3.3399 3.2787 3.2187	8.043 -11 7.87% 7.709 7.548 7.391 7.237 7.087 6.940 6.797 6.657	6.566 :-11 6.428 6.293 6.162 6.033 5.908 5.785 5.666 5.549 5.434
270000 271000 272000 273000 274000 275000 276000 276000 276000 279000	258996 259916 260836 261755 262675 263594 264512 265430 266349 267266	1389.59 1391.12 1392.64 1394.16 1395.66 1397.16 1398.65 1400.14 1401.61 1403.08	1116.44 1117.97 1119.49 1121.01 1122.51 1124.01 1125.50 1126.99 1128.46 1129.93	1710-65 1714-65 1718-65 1718-65 1722-65 1720-65 1734-65 1738-65 1742-65	3.2019 - 7 3.1437 3.0367 3.0308 2.9761 2.9226 2.8701 2.8187 2.7684 2.7191	2.4016 - 7 2.3580 2.3152 2.2733 2.2323 2.1921 2.1528 2.1142 2.0765 2.0395	3.1600 -10 3.1026 3.0463 2.9912 2.9372 2.8884 2.8326 2.7819 2.7322 2.6835	6.521 -11 6.387 6.257 6.257 6.129 6.005 5.883 5.764 5.448 5.534 5.534	5.323 -11 5.214 5.107 5.107 5.003 4.902 4.802 4.705 4.610 4.518 4.427
280000 281000 282000 283000 284000 285600 286000 287000 288000 289000	268184 269101 270018 270935 271851 272767 273683 274599 275514 276429	1404.54 1405.99 1407.43 1408.87 1410.29 1411.71 1413.13 1414.53 1417.32	1131-39 1132-84 1134-28 1135-72 1137-14 1138-56 1139-98 1141-38 1142-78	1750-65 1754-65 1758-65 1762-65 1762-65 1770-65 1774-65 1778-65 1778-65 1782-65	2.6708 - 7 2.6235 2.5771 2.5317 2.4871 2.4435 2.4008 2.3589 2.3178 2.2776	2.0033 - 7 1-9678 1-9330 1-8989 1-8655 1-8328 1-8007 1-7693 1-7385	2.6359 -10 2.5892 2.5434 2.4986 2.4546 2.4116 2.3694 2.3694 2.3280 2.2875 2.2478	5.315	4-339 -11 4-252 4-167 4-085 4-085 4-004 3-925 3-847 3-772 3-698 3-625
290000 291000 292000 293000 294000 295000 296000 297000 298000 299000	277344 278258 279172 280086 281000 281913 282826 283739 284652 285564	1418.70 1420.07 1421.44 1422.80 1424.15 1425.50 1426.84 1428.17 1429.49 1430.80	1145.55 1146.92 1148.29 1149.65 1151.00 1152.35 1153.69 1155.02 1156.34 1157.65	1790-65 1794-65 1798-65 1802-65 1802-65 1810-65 1814-65 1818-65 1822-65	2.2381 - 7 2.1994 2.1615 2.1244 2.0880 2.0522 2.0172 1.9829 1.9492 1.9162	1.6787 - 7 1.6497 1.5213 1.57934 1.55661 1.5393 1.5130 1.4873 1.4620 1.4373	2.2088 -10 2.1707 2.1333 2.07046 2.0607 2.0254 1.9908 1.9570 1.9237 1.8912	4.354 -11 4.269 4.187 4.105 4.026 3.989 3.873 3.798 3.726 3.654	3-554 -11 : 3-465 3-418 3-351 3-287 3-223 3-161 3-101 3-041 2-983
300000 302000 304000 306000 310000 312000 314000 316000 318000	286476 288299 290121 291942 293762 295381 297399 299215 301031 302845	1432 - 13 1433 - 61 1435 - 09 1436 - 55 1437 - 98 1439 - 40 1440 - 79 1442 - 16 1443 - 51 1444 - 84	1158.96 1160.46 1161.94 1163.40 1164.83 1166.25 1167.64 1169.01 1170.36	1830-65 1837-25 1843-85 1850-85 1857-05 1863-65 1870-25 1876-85 1883-45 1890-05	1.8838 - 7 1.8209 1.7604 1.7021 1.6459 1.5919 1.5398 1.4896 1.4896	1.4130 - 7 1.3658 1.3204 1.2767 1.2346 1.1940 1.1549 1.1173 1.0811	1.8592 -10 1.7971 1.7374 1.6798 1.6244 1.5711 1.5197 1.470U UL4224 1.3765	3.585 -11. 3.453 3.3526 3.204 3.088 2.976 2.868 2.765 2.666 2.571:	2.926 -11 2.819 2.715 2.616 2.521 2.429 2.341 2.257 2.176 2.099
320000 322000 324000 326000 326000 330000 332000 334000 336000 338000	304659 306471 308282 310092 311901 313709 315516 317322 319127 320930	1446.15 1447.44 1448.71 1449.96 1451.19 1452.41 1453.60 1454.78 1455.95 1457.10	1173.00 1174.29 1175.56 1176.81 1178.04 1179.26 1180.45 1181.63 1182.80 1183.95	1896.65 1903.25 1909.85 1916.45 1923.05 1929.65 1936.25 1942.85 1949.45	1.3498 - 7 1.3065 1.266 1.2246 1.1858 1.188 1.1123 3.0775 1.0439	1.0124 - 7 9.7998 - 8 9.4869 9.1851 8.8941 8.6135 8.3428 8.0816 7.8296 7.5864	1.3322 -10 1.2894 1.2483 1.2086 1.1703 1.1334 1.0977 1.0634 1.0302 9.9820 -11	2.479 -11 2.391 2.307 2.226 2.148 2.073 2.001 1.932 1.865 1.801	2.024 -11 1.952 1.883 1.817 1.754 1.692 1.634 1.577 1.523

TABLE I.—Continued
GEOMETRIC ALTITUDE, MĒTRĪC UNITS

Altitude		7	emperatur	·e		Pressure	<u> </u>	Der	sity
ςZ, m	H, m	, т,°к	t,°C	T _M ,°K	P, mb	P _i , mm Hg	<u>P</u> P°	ρ, kg m ⁻³	<u>ρ</u> ρ _o
340000 342000 344000 344000 354000 352000 352000 354000 356000	322733 324534 324534 326335 328134 329932 331729 333525 335320 337114 338907	1458.23 1459.34 1460.45 1461.53 1462.61 1463.67 1464.72 1465.75 1466.78 1467.79	1185.08 1186.19 1187.30 1188.38 1189.46 1190.52 1191.57 1192.60 1193.63	1962.65 1969.25 1975.85 1982.85 1989.05 1995.65 2002.25 2008.85 2015.45 2022.05	9.8014 - 8 9.4993 9.2077 8.9261 8.6542 8.3915 8.1379 7.8928 7.6560 7.4272	7.3516 - 8 7.1251 6.9063 6.6951 6.4912 6.2942 6.1039 5.9201 5.7425 5.5709	9.6732 -11 9.3751 9.0873 8.8094 8.5410 8.2818 8.0315 7.7896 7.5559 7.3301	1.740 -11 1.680 1.623 1.569 1.516 1.065 1.416 1.369 1.323 1.280	1.420 -11 1.372 1.325 1.287 1.196 1.156 1.117 1.080 1.045
360000 362000 364000 366000 370000 372000 374000 378000	340699 342490 344279 344068 347856 349642 351427 353212 354995 356777	1468-79 1469-78 1470-76 1471-74 1472-70 1473-66 1474-61 1475-55 1476-48 1477-41	1195.64 1196.63 1197.61 1198.59 1199.55 1200.51 1201.46 1202.40 1203.33 1204.26	2028.65 2035.25 2041.85 2048.45 2055.05 2061.65 2068.25 2074.85 2081.45 2088.05	7.2061 - 8 6.9924 6.7858 6.5860 6.3929 6.2061 6.0255 5.8508 5.6817 5.5182	5.4050 - 8 5.2447 5.0897 4.7951 4.6550 4.5195 4.3884 4.2616 4.1390	7-1119 -11 6-9009 6-6970 6-4999 6-3093 6-1250 5-9467 5-7742 5-6074 5-4460	1.237 -11 1.197 1.158 1.120 1.084 1.015 9.823 -12 9.509 9.206	1.010 -11 9.770 -12 9.451 9.451 9.143 8.847 8.561 8.285 8.019 7.763 7.515
380000 382000 384000 386000 390000 390000 392000 394000 398000	358559 360339 362:18 363896 365673 367449 369223 370997 372770 374542	1478.33 1479.25 1480.16 1481.07 1481.98 1482.88 1483.78 1484.68 1485.58 1486.48	1205-18 1206-10 1207-01 1207-92 1208-83 1209-73 1210-63 1211-53 1212-43 1213-33	2094.65 2101.25 2107.85 2114.45 2121.05 2127.65 2134.25 2180.85 2147.45 2154.05	5.3599 - 8 5.2068 5.0586 4.9151 4.7762 4.6417 4.5115 4.3854 4.2633 4.1450	4.0203 - 8 3.9054 3.7942 3.6866 3.5825 3.4816 3.3839 3.2893 3.1977 3.1090	5.2898 -11 5.1387 4.9924 4.8508 4.7138 4.58810 4.4525 4.3281 4.2075 4.0908	8.914 -12 8.632 8.3098 7.845 7.600 7.364 7.136 6.916	7.277 -02 7.047 6.825 6.611 6.404 6.204 6.011 5.825 5.646 5.472
#00000 #02000 #04000 #06000 #10000 #12000 #14000 #16000	376312 378082 379850 381618 383384 385150 386914 388677 390440 392201	1487.38 1487.31 1487.26 1487.20 1487.16 1487.12 1487.07 1487.05 1487.05	1214.23 1214.16 1214.11 1214.05 1214.01 1213.97 1213.92 1213.92 1213.90 1213.90	2160.65 2165.85 2171.05 2176.25 2181.45 2186.65 2191.85 2197.05 2202.25 2207.45	4.0304 - 8 3.9193 3.8116 3.7072 3.6059 3.5077 3.4124 3.3200 3.2304 3.1434	3.0230 - 8 2.9397 2.9589 2.7806 2.7047 2.6310 2.5595 2.4930 2.3578	3.9777 -11 3.8680 3.7618 3.6587 3.5588 3.618 3.3678 3.2766 3.1881 3.1023	6.498 -12 6.304 6.116 5.934 5.758 5.588 5.588 5.424 5.264 5.110	5.305 -12 5.146 h.993 h.844 h.701 h.562 h.427 h.297 h.171 h.050
\$2000 \$2200 \$2400 \$2400 \$2600 \$3000 \$3000 \$3000 \$3600 \$3600	393961 395720 397478 399235 400991 402746 404500 406253 408005 409756	1487.05 1487.06 1487.09 1487.12 1487.17 1487.22 1487.29 1487.37 1487.47 1487.58	1213.90 1213.91 1213.94 1213.97 1218.07 1218.07 1218.14 1218.22 1218.32 1218.43	2212.65 2217.85 2223.05 2228.25 2233.45 2236.65 2243.85 2249.05 2259.45	3.0591 - 8 2.9772 2.8977 2.8206 2.7458 2.6731 2.6026 2.5341 2.4677 2.4031	2.2945 - 8 2.2331 2.1735 2.1756 2.0595 2.0050 1.9521 1.9008 1.8509 1.8025	3.0190 -11 2.9382 2.8598 2.7837 2.7099 2.6382 2.5686 2.5010 2.4354 2.3717	4.816 -12 4.676 4.541 4.410 4.283 4.160 4.041 3.925 3.813 3.705	3.932 -12 3.817 3.707 3.600 3.496 3.396 3.299 3.204 3.113 3.025
##0000 ##2000 ##6000 ##6000 ##8000 #50000 #55000 #56000 #58000	411506 413255 415002 416749 418495 420240 421983 423726 425467 427208	1487.70 1467.83 1487.98 1468.14 1488.32 1488.52 1488.73 1488.95 1489.45	1214.55 1214.68 1214.83 1214.99 1215.17 1215.37 1215.58 1215.60 1216.30	2264-65 2269-85 2275-05 2280-25 2280-65 2290-65 2301-05 2306-25 2311-45	2.3405 - 8 2.2796 2.2205 2.1630 2.1073 2.0031 2.0004 1.9493 1.8996 1.8513	1.7555 - 8 1.7098 1.66254 1.5806 1.5399 1.5005 1.4621 1.4248 1.3886	2.3098 -11 2.2498 2.1914 2.1348 2.0797 2.0262 1.9743 1.9238 1.8747	3.600 -12 3.499 3.400 3.305 5.212 3.122 3.035 2.951 2.869 2.790	2.939 -12 2.856 2.776 2.698 2.622 2.549 2.478 2.409 2.342 2.278
\$60000 \$62000 \$64000 \$66000 \$70000 \$70000 \$74000 \$76000 \$78000	428948 430686 432424 434160 435896 437630 439364 411096 442828 444558	1489-73 1490-02 1490-33 1490-66 1491-01 1491-38 1491-76 1492-16 1492-58 1493-03	1216-58 1216-87 1217-18 1217-51 1217-86 1218-23 1218-61 1219-01 1219-01	2316.65 2321.85 2327.05 2332.25 2337.45 2342.65 2347.85 2353.05 2355.25 2363.45	1.8043 - 8 1.7587 1.7144 1.6713 1.6294 1.5886 1.5890 1.5105 1.4730	1.3534 - 8" 1.3192 1.2859 1.2536 1.2221 1.1916 1.1619 1.1330 1.1049 1.0775	1.7808 -11 1.7357 1.6920 1.6494 1.6081 1.5679 1.5288 1.4907 1.4538	2.713 -12 2.639 2.566 2.496 2.428 2.362 2.298 2.236 2.176 2.118	2.215 -12 2.154 2.095 2.038 1.982 1.982 1.876 1.876 1.776 1.776
#80000 #82000 #84000 #86000 #90000 #92000 #94000 #96000	446287 448016 449743 451469 453195 454919 456642 458365 460086 461806	1493-49 1493-97 1494-47 1494-99 1495-53 1496-10 1496-68 1497-28 1497-91 1498-56	1220.34 1220.82 1221.32 1221.84 1222.38 1222.95 1223.53 1224.13 1224.76	2368.65 2373.85 2379.05 2384.25 2384.25 2394.65 2394.65 2405.05 2405.05 2410.25	1.4012 - 8 1.3667 1.3332 1.3006 1.2689 1.2380 1.2080 1.1787 1.1503	1.0510 - 8 1.0251 9.9999 - 9 9.7553 9.5173 9.2858 9.0605 8.8413 8.6280 8.4203	1.3829 ~11 1.3489 1.3158 1.2836 1.2523 1.2218 1.1922 1.1633 1.1353 1.1353	2.061 -12 2.006 1.952 1.950 1.850 1.851 1.754 1.707 1.663	1.682 -12 1.637 1.594 1.551 1.510 1.470 1.431 1.394 1.357

TABLE I.—Continued
GEOMETRIC ALTITUDE, METRIC UNITS

	· ·		-	<i>-</i>		·	Secolitic Description		
Altitude Tei			remperatur 	'e.		Pressure		Der	nsity
. Z,∍m	H, m	₹,°К	+, ° C	T _M ,°K	P, mb	P, mm Hg	<u>Р</u> Р 。	ρ, kg m ⁻³	<u>\rho</u>
500000 502000 504000 504000 510000 512000 514000 516000 518000	463526 465244 456961 468678 470393 472107 473521 475533 477244 478954	1499.22 1498.80 1498.40 1498.02 1497.68 1497.05 1497.05 1496.78 1496.53	1226.07 1225.65 1225.25 1224.87 1224.53 1224.20 1223.90 1223.63 1223.38 1223.15	2420.65 2424.05 2427.45 2430.85 2434.25 2437.65 2441.05 2441.05 2447.85 2451.25	1.0957 - 8 1.0694 1.0439 1.0190 9.9474 - 9 9.7111 9.4809 9.2565 9.0379 8.8249	8.2183 - 9 8.0215 7.8298 7.6431 7.4612 7.2839 7.1112 6.9430 6.7790 6.6192	1.0814 -11 1.0555 1.0302 1.0057 7.8173 -12 9.5841 9.3569 9.1355 8.9197 8.7095	1.577 -12 1.537 1.498 1.460 1.424 1.358 1.353 1.319 1.286	1.287 -12 1.255 1.223 1.192 1.162 1.133 1.105 1.077 1.050
52000 522000 524000 524000 528000 538000 532000 534000 536000 538000	#80664 #82372 #84079 #85786 #87491 #87495 #90899 #92601 #94303 #96003	1496.10 1495.93 1495.65 1495.55 1495.47 1495.42 1495.39 1495.38 1495.40	1222.95 1222.78 1222.63 1222.50 1222.40 1222.32 1222.27 1222.24 1222.23 1222.25	2454.65 2458.05 2461.45 2464.85 2468.25 2471.65 2475.05 2478.45 2481.85 2485.25	8-6173 - 9 8-2177 8-0255 7-8382 7-6556 7-4776 7-3040 7-1349 6-9699	6.4635 - 9 6.3117 6.1638 6.0197 5.8791 5.7422 5.6086 5.4785 5.3516 5.2279	8.5046 -12 8.3049 8.1103 7.9206 7.7357 7.5555 7.3798 7.2085 7.0416 6.8788	1.223 -12 1.193 1.163 1.134 1.106 1.079 1.052 1.027 1.001 9.770 -13	9.983 -13 9.736 9.494 9.259 9.031 8.808 6.592 8.381 8.175 7.976
540000 542000 544000 546000 550000 552000 554000 556000 558000	497702 499401 501098 502795 504490 506185 507878 509571 511262 512953	1495.44 1495.51 1495.59 1495.70 1495.84 1495.99 1496.17 1496.36 1496.58	1222.29 1222.36 1222.44 1222.55 1222.69 1222.84 1223.02 1223.21 1223.43 1223.67	2488.65 2492.05 2495.45 2498.85 2502.25 2505.65 2509.05 2512.45 2515.85 2519.25	6.8091 - 9 6.6523 6.4994 6.3502 6.2048 6.0630 5.9247 5.7898 5.6583 5.5583	5-1072 - 9 4-9896 4-8749 4-7631 4-6540 4-5477 4-1439 4-3427 4-2441 4-1478	6.7200 -12 6.5653 6.4144 6.2672 6.1237 5.9838 5.8473 5.7144 5.5843 5.4576	9.532 -13 9.299 9.073 8.853 8.638 8.430 8.226 9.028 7.835 7.647	7.781 -13 7.591 7.407 7.227 7.052 6.881 6.715 6.553 6.396 6.242
560000 562000 564000 566000 570000 572000 574000 576000 578000	514642 516331 518018 519705 521391 523075 524759 526442 528124 529805	1497.09 1497.37 1497.67 1497.99 1498.33 1498.69 1499.07 1499.88 1500.32	1223.94 1224.22 1224.52 1224.84 1225.58 1225.59 1225.92 1226.32 1226.73 1227.17	2522.65 2526.05 2529.45 2532.85 2536.25 2539.65 2543.05 2546.45 2546.45 2549.85 2553.25	5.4048 - 9 5.2827 5.1635 5.0473 4.9339 4.8233 4.7154 4.6100 4.5072 4.4069	4.0539 - 9 3.9623 3.8730 3.7858 3.7008 3.6178 3.5368 3.4578 3.3807 3.3055	5.3341 -12 5.2136 5.0960 4.9813 4.8694 4.7602 4.6537 4.5597 4.5493	7.464 -13 7.285 7.111 6.942 6.777 6.616 6.459 6.307 6.158 6.013	6.093 -13 5.947 5.805 5.667 5.532 5.401 5.273 5.148 5.027 4.908
580000 582000 584000 586000 588000 590000 592000 594000 596000 598000	531484 533163 534841 536518 538194 539869 541543 543216 544888 546559	1500.77 1501.24 1501.72 1502.22 1502.73 1503.27 1503.81 1504.37 1504.94 1505.53	1227.62 1228.09 1228.57 1229.07 1229.58 1230.12 1230.66 1231.22 1231.79 1232.38	2556.65 2560.05 2563.45 2566.85 2570.25 2577.05 2580.45 2583.85 2587.25	4.3091 - 9 4.2135 4.1203 4.0293 3.9405 3.8538 3.7691 3.6865 3.6058 3.5271	3.2321 - 9 3.160% 3.0905 3.0222 2.9556 2.8906 2.8271 2.7651 2.7046 2.6%55	4.2527 -12 4.1584 4.0664 3.9766 3.8889 3.8034 3.7198 3.6383 3.5587 3.4810	5.872 -13 5.734 5.599 5.468 5.341 5.216 5.095 4.977 4.862 4.749	4.793 -13 4.681 4.571 4.864 4.360 4.258 4.159 4.063 3.969 3.877
600000 602000 604000 606000 608000 612000 614000 616000 618000	548230 549899 551567 553234 554901 556566 558230 559894 561556 563218	1506.13 1506.04 1505.97 1505.91 1505.87 1505.83 1505.81 1505.79 1505.79	1232.98 1232.89 1232.82 1232.76 1232.72 1232.68 1232.64 1232.64 1232.64	2590.65 2592.85 2595.05 2597.25 2599.45 2601.65 2603.85 2606.05 2608.25 2610.45	3.4502 - 9 3.3751 3.3018 3.2301 3.1601 3.0917 3.0249 2.9597 2.8559 2.8336	2.5879 - 9 2.5316 2.4765 2.4228 2.3703 2.3190 2.2689 2.2199 2.1721 2.1253	3.4051 -12 3.3310 3.2586 3.1879 3.1188 3.05513 2.9854 2.9210 2.8580 2.7965	4.640 -13 4.535 4.432 4.333 4.235 4.140 4.047 3.956 3.868 3.781	3.787 -13 3.702 3.618 3.537 3.457 3.380 3.304 3.230 3.157 3.087
620000 622000 524000 626000 630000 632000 634000 636000 638000	564879 566538 568197 569855 571511 573167 574822 576476 578129 579781	1505.81 1505.83 1505.86 1505.90 1505.95 1506.00 1506.06 1506.12 1506.18	1232.66 1232.68 1232.71 1232.75 1232.80 1232.85 1232.91 1232.97 1233.03 1233.10	2612.65 2614.85 2617.05 2619.25 2621.45 2623.65 2625.85 2628.05 2630.25 2632.45	2.7727 - 9 2.7132 2.6550 2.5982 2.5827 2.4884 2.4354 2.3336 2.3329 2.2834	2.0797 - 9 2.0350 1.991% 1.9488 1.9072 1.8665 1.8267 1.7878 1.7498	2.7364 -12 2.6777 2.6203 2.5642 2.5094 2.4559 2.4036 2.3524 2.3024 2.2536	3.697 -13 3.615 3.534 3.456 3.379 3.304 3.231 3.160 3.090 3.090	3.018 -13 2.951 2.885 2.621 2.758 2.697 2.638 2.579 2.522 2.467
640000 642000 646000 646000 650000 652000 652000 654000 656000	581432 583082 584732 586380 588027 589674 591319 592964 594607 596250	1506.33 1506.41 1506.49 1506.57 1506.65 1506.73 1506.82 1506.90	1233.18 1233.26 1233.34 1233.42 1233.50 1233.58 1233.75 1233.75 1233.83 1233.91	2634.65 2636.85 2639.05 2641.25 2643.45 2645.65 2647.85 2650.05 2650.05 2650.45	2.2350 - 9 2.1877 2.1845 2.0963 2.0521 2.0090 1.9667 1.9255 1.8851	1.6764 - 9 1.6409 1.6003 1.5724 1.5392 1.5068 1.4752 1.4442 1.4139	2.2058 -12 2.1591 2.135 2.0689 2.0253 1.9827 1.9410 1.5003 1.8605 1.8215	2.955 -13 2.890 2.827 2.765 2.704 2.645 2.588 2.581 2.476 2.422	2.412 -13 2.359: 2.308 2.257 2.208 2.159 2.112 2.066 2.021 1.977

TABLE I.—Concluded
GEOMETRIC ALTITUDE, METRIC UNITS

Alti	Altitude Temperature					Pressure		Density		
Z, m	H ₁ , m	T, °K	t,°C	T _M ,°K	P, mb	P, mm Hg	<u>p</u> p°	<i>ρ</i> , kg⊢m ⁻³	<u>P</u>	
660000 662000 664000 668000 670000 672000 674000 678000	597892 599532 601172 602811 604449 606086 607722 609357 610991 612625	1507.14 1507.22 1507.30 1507.37 1507.43 1507.55 1507.61 1507.65	1233.99 1234.07 1234.15 1234.22 1234.28 1234.35 1234.40 1234.46 1234.50	2656.65 2658.85 2661.05 2663.25 2665.45 2667.65 2669.85 2672.05 2674.25 2676.45	1.8071 - 9 1.7694 1.7325 1.6964 1.6612 1.6267 1.5930 1.5600 1.5278	1.3554 - 9 1.3271 1.2995 1.2724 1.2460 1.2201 1.1948 1.1701 1.1459	1.7835 -12 1.7462 1.7098 1.6743 1.6395 1.6054 1.5722 1.5396 1.5078	2.370 -1.5 2.318. 2.268 2.219 2.171 2.124 2.079 2.034 1.990 1.948	1.934 -1.5 1.892 1.851 1.811 1.772 1.734 1.697 1.660 1.625	
680000 682000 684000 686000 690000 694000 694000 698000 700000	614257 615889 617519 619149 620777 622405 624032 625658 627283 628907 630530	1507.73 1507.75 1507.77 1507.79 1507.79 1507.78 1507.77 1507.77	1234.68 1234.62 1234.64 1234.64 1234.63 1234.60 1234.60 1234.50 1234.50	2678.65 2680.85 2683.05 2685.25 2687.45 2689.65 2691.85 2694.05 2696.25 2698.45	1.4054 - 9 1.4352 1.4057 1.3769 1.32487 1.3210 1.2040 1.2076 1.2418 1.2165	1.0991 -: 9 1.0765 1.0584 1.0327 1.0116 9.908710 9.7061 9.5079 9.3141 9.1245	1.8462 -12 1.4165 1.3874 1.3589 1.3310 1.3038 1.2771 1.2510 1.2255 1.2006	1.906 -13 1.865 1.865 1.786 1.748 1.711 1.675 1.639 1.604 1.570	1.556 -13 1.522 1.490 1.458 1.427 1.397 1.367 1.338 1.310 1.282	
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Table II

ACCELERATION DUE TO GRAVITY, SPECIFIC WEIGHT, PRESSURE SCALE HEIGHT, NUMBER DENSITY, PARTICLE SPEED, COLLISION FREQUENCY, MEAN FREE PATH, AND MOLECULAR WEIGHT

Metric Units

Note: A one- or two-digit number (preceded by a plus or minus sign) following the initial entry of each block indicates the power of ten by which that entry and each succeeding entry of that block should be multiplied. A change of power occurring within a block is indicated by a similar notation.

TABLE II
GEOPOTENTIAL ALTITUDE, METRIC UNITS

		I A s s al		B.:	· · · · · · · · ·	,	Ţ.		T :-
Altif	fude ;	Accel.	Specific weight	Pressure scale	Number density	Particle	Collision	Mean free	
	·	gravity	weight	height	n, m ⁻³	speed V, m sec"	frequency	path.	weight
H, m	Z, m	g, m sec ⁻²	ω, kg m ⁻² sec ⁻²	H _p , m	n, m	v, m sec	ν, sec ⁻¹	k, m	M
-5000	-4996	9.8221	1.8961 + 1	9371.1	4.0140 +25	484.14	1.1503 +10 %	4.2089 - 8	28.764
-4950 -4900	-4946	9.8219	1 8870	9361.7	3.9967	483.89	1-1447	4.2271	28.964
-4850	-4896 -4846	9.8218	1.8798 1.8716 1.8635 1.8554 1.8574	9352.4 9343.0	3.9795 3.9623	483.64 483.40	1.1392 1.1337	4.2454 4.2638	28.964
-4800 -4750	-4796	9-8215	1.8635	9333.7	3.9452	483.15	1.3283	h.2823	28.964
-4700	-4746 -4697	9.8213	1.8574	9324.3 9315.0	3.9112	482.91 482.66	1.1228	1 4.300V	28.964
-4650 -4600	-4647 -4597	9.8210	1.0373	9305.6 9294.3	3.8773	482.41 482.17	1.1120	4.3009 4.3196 4.3384 4.3573	28.964
-4550	-4547	9.8207	1.8313 1.8233	9286.9	3.8605	481.92	1.1012	4.3763	28.964
-4500	-4497	9.8205	1.835¥ +∂	9277.5 9268.2	3.8437 +25	481.68 481.43	1.0959 +10 1.0905	4:3954 - 8 4:4146	28.964
-4450 -4400	4447. _4397	9.8204	1.8075 1.7996	9258.8	3.8270 3.8103	481.18	1.0852	4.4359	28.964
-4350	-4347	9.8201	1.7917	9249.5	3.7937	480.93	1.0799	4.4533	28.964
-4300 -4250	-4297 -4247	9.8199	1.7838: 1.7760	9240.1 9230.8	3.7772 3.7607	480.69	1.0747	4.4729	28.964
-4200	-4197	9.8196	1.7760	9221.4	3.7442	480.19	1.0642	4.5122	28.964
-4150 -4100	-4187 -4097	9.8195	1.7605 1.7527	9212.1 9202.7	3.7278 3.7115	479.95 479.70	1.0590 1.0538	4.5320 4.5520	28.964 28.964
-4050	-4047	9.8192	1.7450	9193.4	3.6952	479.45	1.0487	4.5720	28.964
-4000	-3997 -3948	9.8190	1.7373 + 1 1.7296	9184.0 9174.6	3.6790 +25	479.20 478.95	1.0435 +10	4.5922 - 8 4.6125	28.964
-3950 -3900	-3948 -3898	9.8188	1.7220	9165.3	3.6467	470.71	1.0384	4.6329	28.04k
-3850	-3848 -3798	9.8185	1.7144	9155.9 9146.6	3.6306 3.6146	478.46 478.21	1.0262	4.4534 4.4740	28.964
-3800 -3750	-3748	9.8182	1.6993	9137.2 9127.8	3.5987	477.96 477.71	1.0181 -	4.6947	28.964
-3700	-3698 -3646	9.8181	1.6917	9127:8 9118:5	3.5828 3.5669	477.71 477.46	1.0131	4.7155 4.7365	28.964
-3650 -3600	-3598	9.8178	1.6767	9109.1	3.5511	477.22	1.0031	4.7575	20.764
-3550	-3548	9.8176	1.6693	6099.B	3.5354	476.97	9-9811 + 9	4.7787	28.964
-3500 -3450	-3498 3448	9.8175	1.6618 + 1	9090.4	3.5197 +25 3.5041	476.72 476.47	9.9316 + 9 9.8823	4.8000 - 8 4.8214-	28.964
-3400	-3398	9.8171	1.6470	9071.7	3.4885	476.22	9.8332	4.6430	28.964
-3350 -3300	-3348 -3298	9.8170	1.6397	9062.3	3.4730 3.4575	475.97 475.72	9.7843 9.7356	4.8646 4.8864	28.964
-3250	-3248	9.8167	1.6251	9043.6	3.4421	475.47	9.4871	4.7083	28.964
-3200 -3150	-3198 -3148	9-8165	1.6178	9034.2 9024.9	3.4267 3.4114	475.22	9.4388 9.5907	4.9524	28.964
-3100 -3050	-3098 -3049	9.8162	1.6033	9015.5 9006.2	3.3941 3.3809	474.72 474.47	9.5427	4.9747 4.9971	28.964
-3000	-2999	9.8159	1.5889 + 1	8996.8	3.3658 +25	474.22	9.4574 + 9	5.0196 - 8	28.964
-2950	-2949	9.8158	1.5817	8987.4	3.3507	473.97	9.4001	5.0422	28.764
-2900 -2850	-2899 -2849	9.8156	1.5746	8978.1 8943.7	3.3356 3.3206	473.72 473.47	9.3529 9.3059	5.0449 5.0878	28.964
-2800	-2799	9.8153	1-5604	8959.3	3.3056	473.22	9.2591	5.1108	28.964
-2750 -2700	-2749 -2699	9.8151	1.5534 1.5463	8950.0 8940.6	3.2908 3.2759	472.97 472.71	9.2124 9.1660	5.1340 5.1573	28.964
-2650	J -2649	9.8146	1.5393	8931.3	3.2611	472.46	9.1198	5.1807	28.964
-2600 -2550	-2599 -2549	9.8147	1.5323 1.5254	8921.9 8912.5	3.2464 3.2317	472.21 471.96	9.0737 9.0278	5.2042 5.2278	28.964
-2500	-2499	9.8144	1.5184 + 1	8903.2	3.2170 +25	471.71	0.9821 + 9	5.2516 - 8	28.944
-2450 -2400	-2449 -2399	9.8142	1.5115	8893.8 8885.4	3.2024 3.1879	471.46 471.20	8.9366 8.8912	5.275è 5.2996	28.964
-2350	-23h0	9.8139	1.4978	8875.1	3.1734	470.95	8.6461	5.3238	28.964
-2300 -2250	-2299 -2249	9.8137	1.4909	8865.7 8856.3	3.1590 3.1446	470.70 470.45	8.8011 8.7563	5.3482 5.3726	28.964
-2200:	~2199	9.8134	1.4773	8847.0	3.1302	470-19	8.7117	5.3973	28.964
-2150. -2100	-2149 -2099	9.8133	1.4706	8837.6 8828.2	3.1159 3.1017	469.69	8.6673 8.6230	5.4220	28.964 28.964
-2050	-2049	9.8130	1-4571	8618.9	3.0875	469.44	8.5790	5.4719	20.964
-2000	-1999	9.8128	1.4504 + 1	8609.5	3.0734 +25	469.18	8.5351 + 9	5.4971 - 8	28.964
-1950 -1900	-1949 -1899	9.8127	1.4437	8800.1 8790.7	3.0593 3.0452	468.93 468.68	8.4914 8.4478	5.5224 5.5479	28.964
-1850	~1849	9.8124	1-4305	8781.4	3.0312	468.42	8.4044	5.5735	28.764
-1800 -1750	-1799 -1750	9.8122	1.4239	8772.0 8762.6	3.0173 3.003h	468.17 467.92	8.3613 8.3182	5.5993	28.964
-1700:	-1700	9.8119	1-4107	8753.3	2.9896	467.66	8.2754	5.6512	28.964
-1650 -1600	-1650 -1600	9.8117	1.4042	8743.9 8734.5	2.9758	467.41	8.2327 8.1903	5.6774	28.964
-1550	-1550	9.8114	1.3912	8725.2	2.9483	1466.90	8-1479	5.7303	28.964
-1500.	-1500	9.8113	1.3847 + 1	8715.8	2.9347 +25	466.64 466.57	8.1058 + 9 8.0638	5.7569 - 8 5.7837	28.964
-1450 -1400	-1450 -1400	9.8111	1.3783	8706.4 8697.0	2.9075	466.14	8.0220	5.7837 5.8107	28.96
-1350	-1350	9.8108	1.3655	8687.7	2.8940	465.88	7.9804	5.8378	28.964
-1300 -1250	-1300 -1250	9.8107	1.35//1	8478.3	2.8806 2.8671	465.63 465.37	7.9389 7.8977	5.8651 5.8925	28.964
-1200	-1200	9.8104	1.3464	8459-4	2.6538	465.11	7.8565	5.9201	28-964
-1·150 -1·100] -1150 -1100	9.8102	1.3401	8450.2 8440.8	2.8%05 2.8272	164.86	7.8156 7.7748	5.9478 5.9758	28.964
-1050	-1050	9.8099	1.3276	8631-4	2.8140	464.35	7-7342	6.0038	28.964
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Altit		Accel.	Specific	Pressure scale	Number	Particle	Collision	Mean free	
Z, m	H, m	gravity	weight ω, kg m ⁻² sec ⁻²	height	density n, m ⁻³	speed ∇, m; sec ⁻¹	frequency sec ⁻¹	path L, m	weight M
-, '''	11, 111	g,msec ^{-z}		H _p , m		7,11,000	, 300	<u>_, </u>	
-5000	-5004	9.8221	1.8968 + 1	9371.8	4.0154 +25	484.15	1.1507 +10	4.2075 - 8	28.96
-4950 -4900	-4954 -4904	9.8219	1.8886	9362.4 9353.1	3.9981 3.9808	483.91 483.66	1.1452 1.1396	4.2257	28.96
4850	-4854	9.8216	1-8722	9343.7	3.9636	483.42	1.1341	4.2624 4.2810	28.96
4800 4750	-4804 -4754	9.8215 9.8213	1.8641	9334.3	3.9465 3.9294	483.17 482.92	1.1286	4.2810 4.2996	28.96
-4700	-4703	9.8212	1-8479	9325.0 9315.6	3.9123	482.68	1.1232	4.3183	28.96
-4650 -4600	-4653	9.8210	18399	9306-2	3.8954	482.43	1.1:123	4.3371	25.96
-4550·	-4603 -4553	9.8209 9.8207	1.8319 1.6239	9296.9 9287.5	3.8784 3.8616	482.18 481.94	1.1069 1.1016	4.3560 4.3751	28.96 28.96
-4500	-3503	9.8266	1-8159 + 1	7278.1	- 3.8448 +25"	-481-69	1.0962 +10	4.3942 - 8	28.96
-4450 -4400	-4453 -4403	7.8204 9.8202	1.8080	9268.8 9259.4	3.8280 3.8113	481.44	1.0909 1.0856	4.4134 4.4327	28.95
4350	-4353	9.8201	1.7922	9250.0	3.7947	480.95	1.0803	4.4522	28.96
4300 4250	-4303 -4253	9.8199 9.8198	1.7843	9240.7 9231.3	3.7781 3.7616	480.70 480.45	1.0750	4.4717 4.4914	28.96
4200 I	-4263	9.8196	1.7687	9221.9	3.7451	480.21	1.0645	4.5111	28.96
4150 4100	-4153 -4103	9.8195	1.7609	9203.2	3.7287 3.7123	479.96 479.71	1.0593	4.5310 4.5509	28.96
4050	-4053	9.8192	1.7454	9193.8	3.6960	479.46	1.0489	4.5710	28.96
4000	-4003	9.8190	1-7377 + 1	9184.5	3.6798 +25	479.22	1.0438 +10	4.5912 - 8	28.96
3950	-3952 -3902	9.8189	1.7300 1.7224	9175.1 9165.7	3.6636 3.6475	478.97 478.72	1.0386	<u> 4-6115.</u> 4-6319	28.96 28.96
3850	-3852	9.8185	1.7148	9156.4	3.4314	473.47	1.0284	4.6524	28.96
3800	-3602 -3752	9.8184	1.7072	9147.0	3.6154	478.22 477.97	1.0234	4.6730	28.96
3700	-3702	9.8181	1-6920	9128.3	3.5835	477.72	1.0133	4.7146	28.96
3650 3600	=3652 -3602	9.8179	1.6845	9118.9	3.5676 3.5518	477.48 477.23	1.0083	4.7356 4.7567	28.96
3550	-3552	9.8176	1.6696	9100.1	3.5360	476.96	9.9830 + 9	4.7779	28.96
3500	-3502 -3552	9.8175	1.6621 + 1	9090.8	3.5203 +25 3.5047	476.73 476.48	9.9335 + 9	4.7992 - 8 4.8206	28.96
3450	-3402	9.8173	1-6473	9081.4	3.4891	476.23	9.88%1 9.8350	4.8422	28.96
3350	-3352	9.8170	1.6400	9062.7	3.4735	475.98	9.7860	4.8638	28.96
3300 3250	-3302 -3252	9.8168	1.6326	9053.3	3.4580 3.4426	475.73 475.48	9.7373 9.6887	4.8856 4.9075	28.96
3200	-3202	9.8165	1.6180	9034.6	3.4272	475.23	9.4404	4.9296	28.96
3150 3100	-3152 -3102	9.8164	1.6107	9025.2 9015.8	3.4119 3.3946	474.98 474.73	9.5922. 9.5442	4.9517 4.9740	28.96
3050	-3051	9.8161	1.5963	9006.4	3.3614	474.48	9.4964	1.0961	28.96
3000	-3001	9.8159	1-5091 + 1	8997.1	3.3662 +25 3.3511	474.23	9.4488 + 9	5.0189 - 8	28.96
2950	-2951 -2901	9.8158	1.58(9	9987.7 8978.3	3.3340	473.98 475.72	9.4013 9.3541	5.0416 5.0443	28.94
2850	-2851	9.8155	1-5677	8747.0	3.3210	473.47	9.3071	5.0872	28.94
2800 2750	-2001 -2751	9.8153	1.5406	8959.4 8950.2	3.3040 3.2911	473.22 472.97	9.2602 9.2136	5.1103 5.1334	28.96
2700	-2701	9.6150	1.5465	8940.8	3.2742	472.72	9.1673	5.1567	28.96
2650	-2651 -2601	9.8148	1.5395	8931.5 8922.1	3.2634 3.2467	472.47 472.22	9.1208 9.0747	5.1801 5.2037	28.96
2550	-2551	9.8145	1.5255	8912.7	3.2320	471.96	9.0287	5.2274	28.76
2500 2450	-2501 -2451	9.8144	1.5186 + 1	8703.3	3.2173 +25 3.2027	471.71 471.46	8.9830 + 9 8.9374	5.2512 - 8 5.2751	28.96
2400	-2401	9.8142	1.5048	8884.6	3.1882	471.21	8.8921	5.2992	28.96
2350 2300	-2351 -2301	9.8139	1.4979	8875.2	3.1736	470.76 470.70	8.8449	5.3234	28.96
2300	-2301 -2251	9.8138	1.4842	8865.8 8856.5	3.1572 3.1448	470.45	8.8019 8.7570	5.3478 5.3723	28.76
2200	-2251 -2201	9.813%	1-4774	6847.1	3.1304	470.20	8.7124	5.3969	28.94
2150 2100	-2151 -2101	9.8133	1-4707	8837.7	3.1161 3.1019	469.95	8.6679	5.4217 5.4466	28.94
2050	-2051	9.8130	1.4572	8819.0	3.0877	469.4h	8.5795	5.4716	28.96
2000 1950	-2001 -1951	9.8128	1.4505 + 1	8809.6 8800.2	3.0735 +25 3.0594	469.19	8.5356 + 9	5.5968 ~ 8 5.5221	28.96
1900	-1901	9-8125	1.4372	8790.9	3.0454	468.68	8.4483	5.5476	28.76
1850	-1851 -1801	9.8124	1.4305	8781.5 8772.1	3.0314 3.0174	468.43	8.4049 8.3617	5.5732 5.5 79 0	28.74
1750	-1750	9.8121	1.4173	8742.7	3.0035	467.92	8.3187	5.6249	28.94
1700	-1700 -1650	9.8119	1.4108	8753.4	2.9897 2.9759	467.66	8.2758	5.4510 5.4772	28.96
1400	-1600	9.8116	1.3977	8734.6	2.9621	167.76	8.1906	5.7036	28.76
1550	-1550	9.8116	1.3912	8725.2	2.9484	466.90	8.1483	5.7301	28.96
1500: = 1450	» 1¥50	9.8113	1.3048 + 1	8715.9 8706.5	2.9348 +25 2.9212	466.65	8.1061 + 9	5.7567 - 8	28.96
1400	-1400	9.8110] 1.3719	8697.1	2.9076	465.88	8.0223	5.8105	28.94
1350	-1330 -1300	9.8108	1.3455	8678.3	2.8806	465.63	7.9806	5.8649	28.76
1300	-1250	9.8105	1.3528	8669.0	2.8672	465.37	7.8979	5.8924	28.76
1250						465.12	7.8547	1 3.7200	28.96
-1300 -1250 -1200 -1150	-1200	9.8104	1.3465	8659.6	2.8538 2.8405			5.9477	
1250		9.8104 9.8102 9.8100 9.8099	1.3403. 1.3402 1.3339 1.3276	8650.2 8640.8 8631.5	2.8405. 2.8273 2.8140	464.86 464.60 464.35	7.8158 7.7750 7.7343	5.9477 5.9756 6.0037	28.96

					<u> </u>	LITTUDE, N		INITS (,	
	Altit	ude	Accel. due to	Specific	Pressure scale	Number	Particle	Collision	Mean free	
	· · · · · ·		aravity	weight	height	density	speed	frequency	path	weight
Н,	m	, Z, m	g, m sec ⁻²	weight ω, kg m²sec²	H _{ei} m	n, m ⁻³	⊽, m sec⁻¹	ν, sec ⁻¹	L, m	M.
	000	-1000	9.8097	1.3214 + 1	8622.1	2.8008 +25	464.09	7.6938 + 9	6.0321 - 8	28.964
	950	-950 -900	9-8096	1.3152 1.3090	3612.7 8603.3	2.7877 2.7746	463.84 463.58	7.6535 >7.6134	6.0605 6.0890	28.964
-	850	-850	9.8093	1.:3028	8593.9	2.7616	463.32	7.5734	6.1178	28.964
	-800 T	-800 -750	9.8091 9.8090	1.2967	8584.6 8575.2	2.7486 2;7357	463.07 462.81	7.5337 7.4940	6.1467 6.1757	28.964
l -	-700	-700	9.8088	1.2844	8565.8	2.7228 2.7099	462.55	7.4546 7.4153	6.2050	28.964
	-650 -600	-650 -600	9.8087	1.2783 1.2723	8556.4 8547.1	2.7099 2.6971	462.30 -	7.4153 7.3762	6.2344	28.964
	550	-550	98083	1.2663	8537.7	2.6844	461.78	7.3372	6.2937	28.954
	500 450	-500 -450	9.8082 9.8080	1.2602 + 1	8528.3 8518.9	2.6717 +25 2.6590	461.53 461.27	7.2984 + 9 7.2508	- 6.3537	28.964
	400°	-400 -350	9-8079 9-8077	1.2483	8509.5 8500.2	2.6338	461.01 460.75	7.2508 7.2213 7.1830	6,3840 604145	28-964
-	-300	-300	9.8076	1.2364	8490.8	2.6213	460.49	7.1449	6.4451	28.964
-	250	-250 -2 00	9.8074 9.8073	1.2305	8481.4 8472.0	2.6088 2.5964	460.24 459.98	7.1069 7.0691	6.4759	28.964
-	-150	-150	9.8071	1.2188	8462.6	2.5840	459.72	7.0314	6.5381	28.964
	-100 -50	: -100 -50	9-8070	1.2129	8453.3	2.5717 2.5594	459.46 459.20	6.9939 6.9365	6.5695 6.6010	28.964 28.964
	ò	o	9-8066	1.2013 + 1	8434.5	2.5471 +25	458.94	8.9193 + 9	6.6328 - 8	28.964
	50 100	50 100	9-8065 9-8063	1.1955 1.1898	8425.1 8415.7	2.5349 2.5228	458.69 458.43	6.8823 6.8454	6.6647	28.964
ŀ	150	150	9.8062	1.1841	8466.4	2.5107	458.17	6.8087	6.7292	28.964
	200 250	200 250	9-8060	1.1783	8397.0 8387.6	2.4986	457.91 457.65	6.7721 6.7357	6.7617 6.7944	28.964
	300.	300.	9-8057	1.1670	8378.2	2.4746	457.39	6.6995	6.8273	28.964
l.	350 400	350 . 400	9 - 8054	1.1613	8368.8 8359.5	2.4627 2.4508	457.13 456.87	6.6633 6.6274	6.860h 6.8936	28.964
	450	450	9.8053	1.1501	8350.1	2.5389	456.61	6.5916	6.9271	28.964
ľ	500 550	500 550	9-8051 9-8050	1.1445 + 1. 1.1390	8340.7 8331.3	2.4271 +25 2.4153	456.35 456.09	6.5540 + 9 6.5205	6.9608 - 8 6.9947	28.964
	600	600	9-8048	1.1334 1.1279	8321.9	2.4036	455.83 455.57	6.4851	7.0288	28.964
ŀ	650 700	650 700	9-8046	1.1279	8312.5 8303.2	2.3919 2.3803	455.57 455.31	6.4851 6.4499 6.4149	7.0631 7.0976	28.964 28.964
ľ	750	750	9.8043	1.1169	8293.8 8284.4	2.3687	455.05 454.78	6.3800	7.1324	28.964
	800	800 850	9-8042	1.1060	8284.4	2.3572 2.3457	454.78	6.3800 6.3453 6.3107 6.2762	7.1673	28.964
:	900 950	900 950	9-8039 9-8037	1-1006 1-0952	8265.6 8254.2	2.3342 2.5228	454.26 454.00	6.2762	7.1324 7.1673 7.2024 7.2378 7.2734	28.964 28.964
١,	000	1000	9-8036	1.0898 + 1	8246.8 8237.5	2.3114 +25	453.74	6.2078 + 9	7-3092 - 8	28.964
	100	1050 -1100	79.8034 9.8033	1.08%	i 8228.1 .	2.3001 2.2688	453.48 453.21	6.1738	7.3452 7.3814	28.964
1	150	1150	9.8031	1.0738	8218.7 8209.3	2.2776	452.95	6.1063 6.0727	7.4178 7.4545	28.964
;	200 250	1200 1250	9.5029	1.0685	8199.9	2.2664 2.2552	452.49 452.43	6-0393	7.6914	28.964
۱ ۱	300 350	1300 1350	9 - 8026 9 - 8025	1.0580	8190.5	2.2441 2.2330	452.17	6.0061 5.9729	7.5285 7.5658	28.964
1	400	1400	9.8023	1.0475	8171.7	2.2220 2.2110	451.64 451.38	5.9400 5.9071	7.6034	28.964
	1450 1500	1500	9-8020	1.0423	1	2.2000 +25	451.11	5.8744 + 9	7.6793 - 8	28.764
	550	1550	9-8019	1.0320	8153.0 8143.6	2.1891	450.85	5.8419	7.7175	28.964
1	600	1600 1650	9-8017	1.0268	8134.2 8124.8	2.1783 2.1674	450.59 450.32	5.8095 5.7772	7.7540 7.7948	28.964
١	700	1700	9.8014	1.0166	8115.4	2.1546	450.06	5.7451 5.7131	7.8338	28.964
	750	1750 1801	9-8013	1.0115	8104.0	2.1459 2.1352	449.79 449.53	[5.7131 5.4813	7.8730 7.9124	28.944
1	850	1851	9-8009	1-0014	8087.2	2.1245	449.27	5.6496	7.9522	28.964
	1900 1950	1901	9-8008 9-8006	9.9640 + 0	8077.8	2.1139	448.74	5.6181	7.9921 8.0323	28.764
	1000	2001	9-8005	9.8641 + 0	8059.1	2.0928 +25	448.47	5.5554 + 7	8::0728 - 8 8::1135	28.944
	2050 2100	2051	9.8003	9.8144	8040.3	2.0823	447.94	5.4932	8./1544	28.964
2	150	2151	9-8000	9.7157	8030.9	2.0614	447.68	5.4624	8.1957	28.964
	2200 2250	2201 2251	9-7999	7.6667 7.6178	8021.5	2.0510	447.15	5.4011	8.2371 8.2789	28.964
2	300	2301 2351	9-7994	9.5491 9.5206	8002.7 7993.3	2.0304	446.88 446.61	5.3704 5.3403	8.3209 8.3631	28.964 28.964
2	1350 1400 1450	2401 2451	9.7992	9.4723	7983.9 7974.5	2.0099	446.35	5.3101	8.4056	28.944
1	2500	2501	9.7989	9.3762 + 0	7965.1	1.7896 +25	445.82	5.2501 + 9	8.4915 - 8	28.964
2	2550	2551	9-7988	7.3284	7955.7	1.9795	445.55	5.2204	8.5348	28.964
	2600 2650	2601 2651	9-7986	9.2809 9.2335	7946.3	1.9694	445.28 445.02	5-1907 5-1612	8.5784	28.964
2	700	2701	9.7983	9.1863	7927.5	1.9494	444.75	5.1518	8.6665	28.964
	1750. 1860	2751	9-7982 9-7980	9.1393 9.0925	7918-1	1.9395	444.48	5.1026 5.0735	8.7109	28.964
	1850	2851 2901	9.7979	9.0458 8.9994	7899.3 7889.9	1.9197	443.95 443.68	5.0445 5.0156	8.8006	28.964
	700									

_				GLOWL	.TINIO AL	THOUSE, ME				<u> </u>
	Altit		Accel. due to	Specific weight	Pressure scale	Number density	Particle speed	Collision frequency	Mean free	Molecular weight
	Z, m	H, m	gravity g,msec ⁻²	ω, kg m ⁻² sec ⁻²	height H _e , m		⊽, m sec⁻¹	ν, sec-	L, m	M
	-1000 -950 -900 -850 -800 -750 -750 -650 -600	-1000 -950 -900 -850 -800 -750 -700 -650 -600	9.8097 9.8094 9.8094 9.8093 9.8090 9.8086 9.8087 9.8085 9.8083	1.3214 + 1 1.3152 1.3090 1.3090 1.2967 1.2967 1.2784 1.2784 1.2783 1.2663	8622-1 8612-7 8603-3 8594-0 8594-6 8575-2 8565-8 8556-4 8557-1 8537-7	2.8009 +25 2.7877 2.7746 2.7416 2.7486 2.7357 2.7228 2.7099 2.6971	464.09 463.84 463.58 463.32 463.07 462.61 462.55 462.30 462.04 461.78	7.6939 + 9 7.6536 7.6135 7.5735 7.5537 7.8981 7.8587 7.4158 7.3762 7.3373	6.0320 - 8 6.0604 6.0869 6.1177 6.1466 6.1757 6.2049 6.2343 6.2639 6.2957	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
4	-500 -450	-500 -450	9.8082	1.2603 + 1	8528.3 8518.9	2.6717 +25 2.6590	461.53 461.27	7.2985 + 9 -7.2598	6,3236 - 8 6,3537	28.964
	-400 -350 -360 -300 -250 -200 -150 -100 -50	-400 -350 -300 -250 -200 -150 -100 -50	9.8079 9.8077 9.8076 9.8074 9.8073 9.8071 9.8070 9.8068	1.2483 1.2423 1.2364 1.2305 1.2246 1.2188 1.2129	8509.5 8500.2 8490.8 8481.4 8472.0 8462.6 8453.3	2.6464 2.6338 2.6213 2.6088 2.5964 2.5840 2.5717 2.5594	461.01 460.75 460.49 460.24 459.98 459.72 459.46 459.20	7.2214 7.1830 7.1849 7.1069 7.0691 7.0314 6.9939	6:3840 6:4145 6:4451: 6:4759 6:5069 6:5381 6:5695 6:6010	28.964 28.964 28.964 28.964 28.964 28.964 28.964
Ì	0.	0	9.8066	1.2013 + 1	8434.5	2.5471 +25	458.94	6.9193 + 9	6.6326 - 6	28.964
2	50 100 150 200 250 300 350 400	50 100 150 200 250 300 350 400 450	9.8065 9.8063 9.8060 9.8060 9.8057 9.8057 9.8054 9.8054	1.1955 1.1898 1.1841 1.1783 1.1727 7.1670 1.1613 1.1557 1.1501	8425.1 8415.7 8406.4 8397.0 8387.6 6378.2 8368.8 8359.5 8350.1	2.5349 2.5228 2.5107 2.4986 2.4746 2.4746 2.4627 2.4508 2.4389	458.69 458.43 458.17 457.91 457.65 457.39 457.13 456.87 456.61	6.8823 6.8954 6.8987 6.7721 6.7357 6.6995 6.6634 6.6274 6.5916	6.6647 6.6768 6.7292 6.7617 6.7944 6.8273 6.8603 6.8936	28.96h 28.96h 28.96h 26.96h 26.96h 28.96h 28.96h 28.96h
	500 550 600 650 700 750 800 850 900 950	500 550 600 650 700 750 800 850 900	9.8051 9.8048 9.8046 9.8045 9.8043 9.8042 9.8040 9.8039 9.8037	1.1445 + 1 1.1390 1.1334 1.1279 1.1224 1.1169 1.1115 1.1060 1.1006 1.0952	83k0.7 8331.3 8321.9 8312.5 8303.2 8293.8 8284.4 8275.0 8265.6 8256.3	2.4271 +25 2.4154 2.4036 2.3920 2.3803 2.3688 2.3572 2.35457 2.3343 2.3228	456.35 456.09 455.83 455.57 455.31 455.05 454.79 454.52 454.26 454.00	6.5560 + 9 6.5205 6.5852 6.4500 6.4150 6.3801 6.3103 6.2763 6.2763	6.9408 - 8 6.9947 7.0288 7.0631 7.0976 7.1323 7.1672 7.2024 7.2377	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	1000 1050 1100 1150 1250 1250 1350 1350 1450	1000 1050 1100 1150 1200 1250 1350 1350 1450	9.8036 9.8033 9.8031 9.8031 9.8028 9.8028 9.8025 9.8023 9.8022	1.0898 + 1 1.0895 1.0791 1.0738 1.0485 1.0432 1.0580 1.0527 1.0475 1.0475	8246.9 8237.5 8228.1 8218.7 8209.3 8199.9 8190.6 8181.2 8171.8	2.3115 +25 2.3001 2.2889 2.2776 2.2464 2.2553 2.2442 2.2331 2.2221 2.2111	453.74 453.48 453.22 452.95 452.69 452.83 452.17 451.90 451.64	6.2079 + 9 6.1739 6.1739 6.1401 6.1064 6.0729 6.0395 6.0062 5.9731 5.9402 5.9073	7.3090 - 8; 7.3850 7.3812 7.4177 7.4583 7.4912 7.5283 7.5456 7.6032 7.6410	28.964 28.964 28.964 28.964 28.964 28.964 25.964 28.964 26.964
,	1500 1550 1460: 1650 1700 1750 1800 1850 1900	1500 1550 1600 1650 1700 1750 1799 1859 1899	9.8020 9.8019 9.8017 9.8016 9.8014 9.8013 9.8011 9.8009 9.8008 9.8006	1.0372 + 1 1.0320 1.0267 1.0217 1.0166 1.0116 1.00055 1.0015 9.7645 + 0	8153.0 8143.6 8134.3 8124.9 8115.5 8106.1 8094.7 8087.3 8077.9	2.2001 +25 2.1892 2.1783 2.1675 2.1567 2.1353 2.1287 2.1287 2.1180 2.1035	451.12 450.85 450.59 450.32 450.06 449.80 449.53 449.27 449.00 448.74	5.8747 + 9 5.8421 5.8098 5.7775 5.7454 5.7135 5.6816 5.6500 5.6184 5.5870	7.6790 - 8 7.7172 7.7557 7.7984 7.8334 7.8726 7.9120 7.9517 7.9917 8.0318	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
ξ.	2000 2050 2150 2150 2200 2250 2350 2350 2450	1999 2049 2099 2149 2199 2249 2299 2349 2349 2449	9.8005 9.8003 9.8092 9.8000 9.7997 9.7997 9.7996 9.7994 9.7992 9.7991	9.86h7 + 0 9.8151 9.7657 9.716h 9.667h 9.6185 9.521h 9.h731 9.4250	8059.2 8049.8 9040.4 8031.0 8021.6 8012.2 8002.8 7993.5 7984.1 7974.7	2.0929 +25 2.0824 2.0720 2.0616 2.0512 2.0409 2.0306 2.0203 2.0101 1.9999	448.48 448.21 447.95 447.68 447.42 447.45 446.62 446.35 446.09	5.5558 + 9 5.5246 5.4937 5.4628 5.4321 5.4015 5.3711 5.3408 5.3106 5.2606	8.0723 - 8 8.1129 8.1539 8.1951 9.2365 8.2782 8.3202 8.3628 8.4689 8.4679	28.96h 28.96h 28.96h 28.96h 28.96h 28.96h 28.96h 28.96h 28.96h
, ,	2500 2550 2600 2650 2700 2750 2850 2850 2950	2499 2549 2549 2649 2649 2749 2749 2849 2849	9.7989 9.7988 9.7986 9.7985 9.7983 9.7982 9.7980 9.7977 9.7974	9.3771 + 0 9.3294 9.2819 9.2819 9.285 9.1874 9.1804 9.0936 9.0470 9.0006 8.9544	7965.3 7955.9 7946.5 7927.1 7927.7 7918.4 7909.0 7899.6 7890.2 7880.8	1.9898 +25 1.9797 1.9496 1.9596 1.9596 1.9497 1.9397 1.9298 1.9200 1.9101 1.9004	445.82 445.55 445.29 445.02 444.75 444.49 444.22 445.95 443.49	5.2507 + 9. 5.2210 5.1913 5.1619 5.1325 5.1033 5.0742 5.0452 5.0164 4.9877	8.4906 — 8 8.5339 8.5775 8.6213 8.6655 8.7099 8.7545 8.7995 8.8447 8.8903	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE II.—Continued

Altit	ude	Accel.	Specific weight	Pressure scale	Number density	Particle	Collision frequency	Mean free path	Molecul
l, m	Z, m	gravity g,msec ⁻²	Specific weight ω, kg m ² sec ⁻²	height H _p , m	n, m	V, m sec	ν , sec ⁻¹	L, m	M
3090	3001	9.7974	8.9070 + 0	7871.1	1.8903 +25	443.14	4.9583 + 9	8.9374 - 8	28.96
3050	3051	9.7972	_ 8.861F	7861.7	1.8806	442.88	4.9299	8.9835	28.96
3100 3150	3102 3152	9.7971 9.7969	8.8154 8.7698	7852.3 7842.9	1.8709 1.8613	442.61 442.34	4.9015 4.8733	9.0300	28.96
3200	3202	9.7968	0.7245	7833.6	1.8517	442.07	4.8452	9.1238	28.76
3250	3252	9.7946	8.6793	7824.2	1.8422	441.80	4.8173	9.1712	28.95
3300	3302	9.7965	8.6343	7814-8	1.8326	441.53	4.7895	9.2188	28.96
3350 3400	3352 . 3402	9.7963	8.5895 8.5448	7805+4 7796-0	1.8231 1.8137	441.26	4.7618 4.7342	9.2668	28.96 28.96
3450	3452	9.7960	8.5004	7786.5	1.8043	440.72	4.7068	9.3636	28.96
3500 3550	§ 3502 3552	9.7959 9.7957	8.4561 + 0 8.4119	7777.1 7767.7	1.7949 +25	440.45 440.19	4-6795 + 9 4-6523	9.4125 - 8 9.4617	28.96
3000	3602	9.7955	8.3680	7767.7 7758.3	1.7856	439.92	4.6252	9.5113	28.96
3650	3652 3702	9.7954	8.3242	7718.9	1.7670	439.65	4.5983	9.5611	28.96
3700 3750	3752	9.7952	8.2807 8.2372	7739.5 7730.1 7720.7	1.7578 1.7486	439.37 439.10	4.5714 4.5447	9.6113 9.6618	28.96
3800	3802	9.7949	8.1940	7720.7	1.7395	438.63	4.5182	9.7126	28.96
3850	3852	9.7948	8.1510	7711'-3	1.7303	M38.56	4.4917	9.7638	28.96
3900 3950	3902 3952	9.7946	8.1061 8.0655	7701.9 7692.5	1.7213	438.29 438.02	4.4654 4.4392	9.8153 9.8671	28.96
.000	4003	9.7943	8.0228 + 0	7683.1	1.7032 +25	437.75	4.4131 + 9	9.9193 - 8	28.96
1050	4053	9.7942	7.9804	7673.7	1.6942	437.48	4.3872	⇒9.9718	28.96
100	4103	9.7940	7.9382	7664.3 7654.9	1.6853	437.21	4 - 3613	1.0025 - 7	28.96
150	4153 4203	9.7938	7.8962 7.8544	7654.9	1.6764	436.66	4.3356 4.3100	1.0078	28.96
250	4253	9.7935	7.8127	7636. ì	1.6587	436.39	4.2845	1.0185	28.96
300	4303	9.7934	7.7711	7626.7	1.6499	436.12	4.2592	1.0240	28.96
350	4353	9.7932	7.7298	7617.3	1.6412	435.85 435.57	4.2339	1.0294	28.96
400 450	4453	9.7931 9.7929	7.6886 7.6476	7607.9 7598.5	1.6325 1.6238	435.30	4.2088 4.1838	1.0349 : 1.0404	28.96
500	4503	9.7928	7.6068 + 0	7589.1	1.6151 +25	435.03	4-1589 + 9	1.0460 - 7	28.96
550	4553 4603	9.7926 9.7925	7.5661 7.5256	7579.7 7570.3	1.5980	434.75 434.48	4.1341 4.1095	1.0516	28.94
450	4653	9.7923	7.4852	7560.8	1.5894	434.21	4.0849	1.0629	28.96
700	\$703	9.7922	7.4451	7551.4	1.5809	433.93	4.0605	1.0687	28.96
×750	4754	9.7920	7.4051	7512.0	1.5724	433.66	4.0362	1.0744	28.96
800	4804 4854	9.7918	7.3652 7.3255	7532.6 7523.2	1.5640	433.39 433.11	4.0120 3.9880	1.0802	28.96
850	4904	9.7915	7.2860	75.13.8	1.5472	432.84	3.9640	1.0919	28.96
950	4954	9.7914	7.2467	7504.4	1.5389	432.56	3.9401	1-0978	28.96
5000 5050	5004 5054	9.7912	7.2075 + 0 7.1684	7495.0 7485.6	1.5306 +25	432.29 432.01	3.9164 + 9 3.8928	1.1038 - 7	28.96
5100	5104	9.7911	7.1296	7476.2	1.5223	M31.74	3.8693	1.1158	28.96
150	5154	9.7908	7.0909	7466.7	1.5059	431.46	3.8459	1.1219	28.96
200	5204	9.7906 9.7905	7.0523	7457.3	1.4978	431.19	3.8226	1.1280	28.96
5250	5254	9.7905	7.0140	7447.9	1.4896	430.91	3.7994 3.7764	1.1342	28.96
5300 5350	5304 5355	9.7903 9.7901	6.9757 6.9377	7429.1	1.4815	430.64 430.36	3.7704 3.753h	1.1404	28.96
5000	5405	9.7900	6.8998	7419.7	1.4654	430.08	3.7534 3.7306	1.1466	28.96
450	5455	9.7898	6.8620	7410.3	1.4575	429.81	3.7078	1.1592	28.96
5500	5505	9.7897	6.8244 + 0	7400.9 7391.4	1.4495 +25	429.53	3.6852 + 9 3.6627	1.1656 - 7. 1.1720	28.96
550 600	5555 5605	9.7895	6.7497	737.1.5	1.4410	429.20	3.6403	1.178	28.04
6450 j	5655	9.7894 9.7892	6.7126	7382.0 7372.6	1.4258	428.70	3.6180	1.1784	28.96
700	5705	9.7891	6.6757	7363.2	1.4180	428.42	3.5958	1 1.1015	28.96
5750	5755	9.7889	6.6389	7353.8	1.4102	428.15 427.87	3.5737	1.1980	28.94
800 850	5805 5855	9.7888	6.6022	7344.4 7335.0	1.4024	427.87	3.5518 3.5299	1.1980 1.2047 1.2113	28.96
900	5905	7.7865	6.5294	7325.5	1.3870	127.31	3.5081	1.2181	28.96
950	5956	9.7863	6.4932	7316.1	1.3793	427.04		1.2181	28.96
0000 0050	6006 6056	9.7881 9.7880	6.4572 + 0 6.4213	7306.7 7297.3	1.3717 +25 1.3641	426.76 - 426.48	3.4649 + 9	1.2317 - 7	28.96
100	6106	9.7878	6.3856	7287.9	1.3565	426.20	3.4221	1.2454	28.94
5150	6156	9.7877	6.3500	7278.5	1.3490	425.92	3.4009	1.2524	28.96
200	6206	9.7875	6.3146	7269.1	1.3415	425.64	3.3798	1-2594	28.96
300	6256 6306	9.7874	6.2794	7259.6 7250.2	1.3340	425.36	3.3588 3.3378	1-2664	28.96
350	6356	9.7871	6.2093	7240.8	1.3192	124.80	3.3170	1.2807	28.96
400	6406	9.7869	6.1745	7231.4	1.3118	424.53	3.2963	1.2879	28.76
450	6457	9.7868	6.1598	7222.0	1.3045	424.25	3.2757	1-2951	28.96
5500 5550	6557 6557	9.7866	4.1053 + 0 6.0709	7212.5	1.2972 +25	423.97 423.68	3.2552 + 9 3.2348	1.302% - 7	28.96
1400	8607	9.7863	6.0367	7193.7	1.2826	423.40	3.2145	1.3172	28.96
1650	6657	9.7861	6.0027	7184.3	1.2754	423.12	3,1942	1.3246	28.96
0076	6707	9.7860	5.9687	7174.9	1-2682	422.84	3-1741	1.3322	28.96
1750	6757	9.7858	5.9350 5.9013	7165.4	1.2611	422.56 422.28	3.1541 3.1342	1.3397	28.96
PECO	6807 6857	9.7857 9.7855	5.8679	7146.6	1.2559	422.00	3.1144	1.3550	28.96
						1 027722			
900 900	6967 6955	9.7854	5.8345 5.8013	7137.2	1.2398	421.72 421.44	3.0947 3.0751	1.3627	28.96

.

TABLE II.—Continued

Altit		Accel due to		Pressure scale	Number density	Particle speed	Collision	Mean free	Molecular weight
Z, m	H, m	gravity g,msec⁻²	ω, kg m ⁻² sec ⁻²	height H _P , m	n, m ⁻³	⊽, m sec⁻!	ν, sec-	L, m	M :
3000 3050 3100 3150	2999 3049 3098 3148	9.7974 9.7972 9.7971 9.7969	0.9083 + 0 0.8625 08.8168 8.7713	7871.4 7862.0 7852.6 7843.2	1.8904 +25 1.3809 1.8712 1.8616	443.15 442.88 442.62 442.35	4.9591 + 9 4.9307 4.9024 4.8742	8.9361 - 8 8.9822 9.0286 9.0753	28.964 28.964 28.964 28.964
3200 3250 3300 3350	3198 3248 3298 3348	9.7968 9.7966 9.7965 9.7963	8.7259 8.6808 8.6358 8.5910	7833.9 7824.5 7815.1 7805.7	1.8616 1.8520 1.8425 1.8330 1.8235	442.08 441.81 441.54 441.27	4.8461 4.8182 4.7904 4.7628	9.1223 9.1696 9.2172 9.2651	28.964 28.964 28.964 28.964
3400 3450 3500	3398 3448 3498	9.7962 9.7960 9.7959	8.5464 8.5020 8.4578 + 0	7796.3 7786.9	1.8140 1.8046 1.7953 +25	441.00 440.73	4.7352 4.7078 4.6805 + 9	9.3133 9.3618 9.4106 - 8	28.964 28.964 28.964
3550 3600 3650	3548 3598 3648	9.7957 9.7956 9.7954	8.4137 8.3698 8.3261	7777.5 7768.1 7758.7 7749.3	1.7859 1.7767 7.7674	440.20 439.63 439.66	4.6533 4.6263 4.599k	9.4598 9.5092 9.5590	28.964 28.964 28.964
3700: 3750 3800: 3850 3900	3698 3748 3798 3848 3898	9.7952 9.7951 9.7949 9.7948 9.7946	8.2825 8.2392 8.1960 8.1530 8.1101	7739.9 7730.6 7721.2 7711.8 7702.4 7693.0	1.7582 1.7490 1.7399 1.7308	439.39 439.12 438.85 438.58 438.31	h.5726 h.5459 h.5194 h.4930 h.4667	9.6091 9.6596 9.7103 9.7614 9.8128	28.964 28.964 28.964 28.964 28.964
3950 4000 4050 4100	3948:, 	9.7945 9.7943 9.7942 9.7940	8.0674 8.0249 + 0 7.9826 3.9805	7683.6 7674.2 7664.8	1.7127 1.7037 +25 1.6947 1.6858	437.76 437.49 437.22	4.4405 4.4144 + 9 4.3085 4.3627	9.8646 9.9166 - 8. 9.9691 1.0022 - 7	28.964 28.964 28.964 28.964
4150 4200 4250 4300 4350 4400	4147 4197 4247 4297 4347 4397	9.7939 9.7937 9.7935 9.7934 9.7932 9.7931	7.8985 7.8567 -7.8150 7.7756 7.77323 7.6911	7655.4 7646.0 7636.6 7627.2 7617.8 7608.5	1.6769 1.6680 1.6592 1.6505 1.6417	436.95 436.68 436.41 436.13 435.86 435.59	4.3370 4.3114 4.2860 4.2606 4.2354 4.2103	1.0075 1.0128 1.0182 1.0236 1.0291 1.0386	28.964 28.964 28.964 28.964 28.965 28.964
4450 4500 4550 4600	4447 4497 4547 4597	9.7929 9.7928 9.7926 9.7925	7.6502 7.6094 + 0 7.5687 7.5283	7599.1 7589.7 7580.3 7570.9	1.6243 1.6157 +25 1.6071 1.5985	435.32 435.05 434.77 434.50	4.1856 4.1605 + 9 4.1357 4.1111	1.0401 1.0457 - 7 1.0513 1.0569	28.964 28.964 28.964 28.964
4650 4700 4750 4800 4850 4900	4647 4697 4796 4796 4846 4896	9.7923 9.7922 9.7920 9.7919 9.7917 9.7915	7.4880 7.4479 7.4079 7.3681 7.3285 7.2890	7561.5 7552.1 7542.7 7533.3 7523.9 7514.5	1.5900 1.5815 1.5730 1.5646 1.5562 1.5479	434.25 433.95 433.66 433.41 433.13 432.86	4.0866 4.0622 1.0379 4.0138 3.9897 3.9658	1.0626 1.0683 1.0740 1.0798 1.0856 1.0915	28.964 28.964 28.964 28.964 28.964 28.964
5000 5050 5100 5150 5200 5250 5350	4946 5046 5096 5146 5198 5246 5296 5346	9.7914 9.7912 9.7911 9.7909 9.7908 9.7905 9.7905 9.7903	7.2497 7.2105 + 0 7.1716 7.1328 7.0941 7.0556 7.0173 6.9791 6.9411	7505.1 7495.7 7486.5 7476.9 7467.5 7458.1 7488.7 7439.3 7429.9	1.5395 1.5313 +25 1.5230 1.5146 1.5046 1.4984 1.4903 1.4822 1.4742	432.58 432.31 432.04 431.76 431.49 431.21 430.66 430.39	3.9420 3.9183 + 9 3.8947 3.8712 3.8246 3.8014 3.7555	1.0974 1.1033 - 7 1.1093 1.1153 1.1214 1.1275 1.1356 1.1398 1.1460	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
5400 5450 5500	5395 5445 5495	9.7900 9.7899 9.7897	6.9032 6.8655 6.8280 + 0	7420.6 7411.2 7401.8	1.4502 +25	\$30.11 \$29.83	3.7327 3.7099 3.6874 + 9	1.1523 1.1586 1.1650 - 7	28.964 28.964
5550 5600 5650 5700 5750 5850 5850 5950	5545 5595 5645 5645 5745 5745 5745 5895	9.7895 9.7894 9.7891 9.7889 9.7888 9.7886 9.7885 9.7883	5.7906 6.7534 6.7164 6.6794 6.6427 6.6061 6.5697 6.5334 6.4973	7392.4 7383.0 7373.6 7364.2 7354.9 7345.4 7336.0 7326.6 7317.2	1.423 1.434 1.4266 1.4188 1.4110 1.4032 1.3955 1.3878 1.3802	429.28 429.01 428.73 428.45 428.18 427.90 427.62 427.34 427.07	3.6649 3.6425 3.5981 3.5760 3.5541 3.5322 3.5105 3.4867	1.1713 1.1778 1.1843 1.1908 1.1974 1.2040 1.2106 1.2173 1.2241	28.964 28.964 28.964 28.964 28.964 28.964 28.964
6000 6050 6100 6150 6250 6250 6350 6350	5994 6044 6094 6144 6194 6294 6344 6394	9.7882 9.7880 9.7879 9.7877 9.7875 9.7874 9.7872 9.7871	6.4613 + 0 6.4255 6.3898 6.3543 6.3189 6.2837 6.2486 6.2137 6.1790	7307.8 7298.4 7289.0 7279.6 7270.2 7260.8 7251.4 7242.0 7232.6	1.3726 +25 1.3650 1.3574 1.3499 1.3424 1.3350 1.3275 1.3201 1.3128	426.79 426.51 426.23 425.96 425.68 425.40 425.12 424.84	3.4675 + 9 3.4559 3.4246 3.4034 3.3823 3.3613 3.3106 3.2990	1.2309 - 7 1.2317 1.2446 1.2515 1.2585 1.2656 1.2726 1.2778 1.2870	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
6450 6550 6550 6650 6700 6750 6750 6850 6850	6493 6593 6693 6693 6743 6793 6893	9.7868 9.7865 9.7863 9.7862 9.7869 9.7857 9.7855 9.7855	6.1443 6.1099 + 0 6.0756 6.0074 5.9735 5.9398 5.9062 5.8728 5.8395	7223.2 7213.8 7204.4 7195.0 7185.6 7174.2 7166.8 7157.4 7188.0	1.3054 1.2981 +25 1.2909 1.2836 1.2764 1.2692 7.2621 1.2550 1.2479 1.2479	124.28 124.00 123.72 123.14 123.16 122.88 122.80 122.32 122.00 121.76	3.2784 3.2579 + 9 3.2375 3.2172 3.1770 3.1570 3.1570 3.1371 3.1173 3.0976	1.2942 1.3015 - 7 1.3085 1.3162 1.3236 1.3311 1.3386 1.3462 1.3539 1.3616	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

	Altit	ude	Accel.		Pressure scale	Number density	Particle speed	Collision frequency	Mean free	Molecular weight
Ī	H; m	Z, m	gravity. g,msec ⁻²	ω, kg m²sec²	height H _p , m	n, m ⁻³	V, m sec⁻'	ν, sec-	path. L _e m	M
	7000 7050 7100 7150 7200 7250 7300 7350 7400 7450	7008 7058 7108 7158 7208 7258 7308 7359 7409	9.7851 9.7849 9.7848 9.7846 9.7844 9.7843 9.7841 9.7840 9.7838	527683 + 0 5.7354 5.7026 5.6700 5.6376 5.6052 5.5731 5.5410 5.5091	7.1.18-3; 7108-9 7099-5 7090-1 7080-6 7071-2 7061-8 7052-4 7043-0 7033-5	1.2257 +25 1.2188 1.2118 1.2118 1.2049 1.1980 1.1912 1.1844 1.1776 1.1708	421.15 420.87 420.59 420.31 420.02 419.74 419.46 419.18	3.0556 + 9 3.0362 3.0168 2.9976 2.9785 2.9595 2.9405 2.9217 2.9030	1.3783 - 7 1.3862 1.3941 1.4021 1.4183 1.4265 1.4347 1.4430	25.964 28.964 28.964 28.964 28.964 28.964 28.964
	7500 7550 7600 7650 7750 7750 7800 7850 7950	7459 7509 7559 7609 7659 7709 7759 7810 7860 7910	9.7837 9.7835 9.7834 9.7831 9.7829 9.7827 9.7826 9.7824 9.7823 9.7821	5.4774 5.4457 + 0 5.4143 5.3829 5.3517 5.3207 5.2897 5.2897 5.2683 5.1978 5.1674	7024.1 7014.7 7005.3 6925.8 6986.4 6977.0 6967.5 6958.1 6948.7 6939.3	1.1574 +25 1.1507 1.1507 1.1441 1.1375 1.1309 1.1243 1.1178 1.1178 1.1048 1.008	418.61 418.32 418.04 417.76 417.47 417.19 416.90 416.62 416.33 416.05	2.8658 + 9 2.8473 2.8277 2.8107 2.7925 2.7744 2.7564 2.7564 2.7207 2.7030	1.4513 1.4597 - 7 1.4682 1.4767 1.4853 1.4039 1.5027 1.5114 1.5203 1.5292 1.5381	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	8000 8050 8100 8150 8200 8250 8350 8450 8450	8010 8060 8110 8160 8211 8261 8311 8361 8411 8461	9.7820 9.7818 9.7817 9.7815 9.7814 9.7812 9.7811 9.7809 9.7807 9.7806	5.1372 + 0 5.1071 5.0771 5.0473 5.0176 4.9880 4.9293 4.9001 8.8711	6929-8 6920-4 6911-0 6901-6 6892-1 6892-7 6873-3 6854-4 6855-4	1.0920 ±25 1.0856 1.0792 1.0729 1.0666 1.0604 1.0541 1.0479 1.0417	415.48 415.19 414.90 414.62 414.33 414.04 413.76 413.47 413.48	2.6954 + 9 2.6579 2.6504 2.6531 2.6158 2.5987 2.5816 2.5686 2.5477 2.5309	1.5472 - 7 1.5563 1.5654 1.5746 1.5839 1.5933 1.6027 1.6122 1.6218 1.6314	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	8500 8550 8600 8650 8700 8750 8850 8850 8950	8511 8562 8612 8662 8712 8762 8812 8862 8912	9.7804 9.7803 9.7801 9.7800 9.7798 9.7797 9.7795 9.7794 9.7792 9.7791	4.8422 + 0 4.8134 4.7048 4.7563 4.7279 4.6997 4.6715 4.6436 4.6157 4.5880	6835-5 6826-1 6816-7 6807-2 6797-8 6788-4 6779-0 6769-5 6760-1	1.029h +25 1.0233 1.0173 1.0112 1.0052 9.9922 +2h 9.9325 9.8732 9.8141 9.7553	#12.61 #12.32 #12.03 #11.7% #11.45 #11.16 #10.59 #10.30 #10.01	2.5141 + 9 2.4975 2.4809 2.4645 2.4881 2.4318 2.4156 2.3995 2.3834 2.3675	1.6412 - 7 1.6509 1.6608 1.6707 1.6807 1.6908 1.7009 1.7112 1.7215	28.764 28.764 28.764 28.764 28.764 28.764 28.764 28.764
	9000 9050 9150 9150 9250 9350 9350 9450	9013 9063 9113 9163 9213 9263 931h 9364 9414	9.7789 9.7787 9.7786 9.7784 9.7783 9.7781 9.7780 9.7777 9.7777	4.5604 + 0 4.5329 4.5055 4.4783 4.4512 4.4512 4.4243 4.3974 4.3107 4.3461	6741-2 6731-8 6722-3 6712-9 6703-5 6694-0 6684-6 6675-2 6656-3	9.6968 +24 9.6385 9.5805 9.5228 9.4653 9.4081 9.3512 9.2985 9.2381 9.1819	409.72 409.43 509.14 408.85 408.27 407.97 407.48 407.39	2.3516 + 9 2.3758 2.3758 2.3045 2.2890 2.2735 2.2581 2.2428 2.2276 2.2125	1.7423 ~ 7 1.7528 1.7634 1.7741 1.7849 1.7958 1.8067 1.8177 1.8288 1.8490	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	9500 9550 9600 9650 9700 9750 9850 9850 9950	9514 9564 9615 9665 9715 9765 9815 9865 9915	9.7774 9.7772 9.7770 9.7769 9.7767 9.7766 9.7764 9.7763 9.7761 7.7760	4.2913 + 0 4.2651. 4.2390 4.2130 4.1614 4.1614 4.1350 4.103 4.0849 4.0597	6646.9 6637.4 6628.0 6618.6 6609.1 4599.7 6590.2 6571.4 6551.9	9-1261 +24 9-0704 9-0151 8-9400 8-9051 8-8505 8-7962 8-7921 8-6883 6-6883 6-6883	404.81 406.52 406.22 405.93 405.35 405.05 404.76 404.47	2.1975 + 9 2.1825 2.1876 2.1528 2.1381 2.1235 2.1089 2.0984 2.0800 2.0657	1.8513 - 7 1.8626 1.8740 1.8856 1.8972 1.9089 1.9207 1.9326 1.9445	26.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	10000 10050 10100 10150 10200 10250 10300 10350 10450	10016 10066 10116 10166 10216 10267 10317 10367 10417	9.7758 9.7757 9.7757 9.7755 9.7754 9.7750 9.7749 9.7747 9.7746 9.7744	4.0345 + 0. 4.0095 3.9846 3.9599 3.9352 3.9107 3.8862 3.8619 3.8378 3.8137	6552.5 6543.0 6533.6 6524.2 6514.7 6505.3 6495.8 6486.8 6476.9 6467.5	8.5814 +24 8.5283 8.4755 8.4250 8.3706 8.3186 8.2668 8.2152 8.1639 8.1128	403.88 403.58 403.29 402.99 402.70 402.40 402.11 401.81 401.52 501.22	2.0514 + 9 2.0373 2.0373 2.0232 2.0092 1.9952 1.9814 1.9676 1.9539 1.9402 1.9267	1.9688 - 7 1.9810 1.9933 2.0058 2.0183 2.0310 2.0494 2.0565 2.0494 2.0825	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	10500 10550 10400 10450 10750 10750 10850 10850 10950	10517 10568 10518 10668 10718 10768 10818 10869 10919	9.7743 9.7741 9.7740 6.7738 9.7737 9.7735 9.7734 9.7732 9.7730 9.7729	3.7897 + 0 3.7659 3.7422 3.7186 3.6951 3.6717 3.6486 3.6253 3.6022 3.5793	6458.1 6448.6 6439.2 6429.7 6420.3 6410.4 6401.4 6392.0 6392.5 6373.1	8.0620 +24 8.0114 7.9610 7.9109 7.8611 7.7621 7.7621 7.7129 7.6640 7.6154	400.93 400.63 400.33 400.04 399.74 399.14 399.14 398.85 398.85	1.9132 + 9 1.8998 1.8864 1.8732 1.8600 1.8469 1.8338 1.8209 1.8080 1.7951	2.0956 - 7 2.1088 2.1222 2.1356 2.1492 2.1628 2.1766 2.1766 2.1904 2.2044 2.2185	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE T.-Continued

Altit	4, 13	Accel: due to	weight	Pressure scale	Number density	Particle speed	Collision	Mean free	Molecular weight
Z, m	H, m	gravity g,msec ^{-≥}	ω, kg m ⁻² sec ⁻²	height H _e , m	n, m ⁻³	⊽, m sec⁻¹		L, m	М
7000 7050 7100 7150 7200 7250 7300 7350 7400 7450	6992 7042 7092 7142 7192 7242 7292 7392 7391 7441	9.7851 9.7849 9.7846 9.7845 9.7845 9.7842 9.7842 9.7839 9.7837	5.7734 + 0 5.7405 5.7078 5.6753 5.6428 5.6106 5.5784 5.5464 5.5146 5.4629	7119.8 7110.4 7101.0 7091.6 7082.2 7072.8 7063.4 7054.0 7044.6 7035.2	1.2268 +25 1.2199 1.2129 1.2060 1.1992 1.1923 1.1855 1.1787 1.1720 1.1653	421.20 420.92 420.63 420.35 420.07 419.79 419.51 419.22 418.94 418.66	3.0586 + 9 3.0392 3.0199 3.0007 2.9816 2.9626 2.9437 2.9249 2.9062 2.8876	1.3771 - 7 1.3850 1.3929 1.4008 1.4008 1.4089 1.4170 1.4251 1.4333 1.4415	28.964 28.964 26.964 26.964 28.964 28.964 28.964 28.964
7500 7550 7600 7650 7700 7750 7800 7850	7491 7541 7541 7641 7691 7741 7790 7840	9.7835 9.7834 9.7832 9.7831 9.7829 9.7826 9.7825	5.4513 + 0 5.4199 5.3686 5.3574 5.3264 5.2956 5.2648 5.2342	7025.8 7016.4 7007.0 6997.6 6988.2 6978.8 6969.3	1.1586 +25 1.1519 1.1453 1.1357 1.1321 1.1321 1.1126	418.37 418.09 417.81 417.52 417.24 416.96 416.61 416.39	2.8690 + 9 2.8506 2.8323 2.81%0 2.7759 2.7778 2.7599 2.7820	1.4582 - 7 1.4567 1.4752 1.4837 1.4923 1.5010 1.5097	28.964 28.964 28.964 28.964 28.964 28.964 28.964
7900 7950 8050 8150 8150 8200 8250 8350 8350	7890 7940 7990 8040 8090 8140 8189 8289 8289 8339 8389	9.7823 9.7822 9.7820 9.7819 9.7817 9.7815 9.7814 9.7811 9.7809 9.7808	5.2038 5.1734 5.1132 + 0 5.1132 5.0833 5.0535 5.0238 4.9943 4.9649 4.9357 4.9066	6950.5 6941.1 6931.7 6922.3 6912.9 6903.5 6894.1 6884.7 6875.3 6865.9 6856.5	1.0869 1.0806 1.0742 1.0680 1.0617 1.0555 1.0493	416.10 415.82 415.25 415.25 414.68 414.39 414.10 413.82 413.53 413.25	2.72k2 2.7065 2.6089 + 9 2.671k 2.6360 2.6367 2.6195 2.6023 2.5853 2.5683 2.551k	1.5274 1.5363 1.55453 - 7 1.5544 1.5635 1.5727 1.5820 1.5913 1.6007	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
8450 8500 8550 8600 8650 8700 8750 8850 8900 8950	8439 8489 8539 8588 8638 8688 8738 8788 8838 8838	9.7805 9.7805 9.7803 9.7800 9.7797 9.7797 9.7796 9.7794 9.7794 9.7792	4.8776 4.8487 + 0 4.8200 4.7914 4.7430 4.7346 4.7064 4.6784 4.6504 4.6504 4.5949	6847.1 6837.7 6828.3 6818.9 6809.5 6800.1 6790.7 6781.2 6771.8 6762.4 6753.0	1.0369 1.0308 +25 1.0247 1.0187 1.0126 1.0066 1.0007 9.9470 +24 9.8878 9.8288 9.7701	412.96 412.67 412.38 412.10 411.81 411.52 411.23 410.95 410.66 410.37	2.5346 2.5179 + 9 2.5013 2.4848 2.4683 2.4520 2.4357 2.4195 2.4034 2.3874 2.3715	1.6293 1.6389 - 7 1.6487 1.6585 1.6684 1.6783 1.6884 1.6785 1.7086 1.7189	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
9000 9050 9100 9150 9250 9250 9350 9460 9450	8937 9037 9087 9137 9187 9237 9236 9336 9366 9436	9.778? 9.7788 9.7786 9.7785 9.7783 7.7782 9.7780 9.7777 9.7777	4.5674 + 0 4.5399 4.5126 4.4855 4.4855 4.4315 4.4315 4.4047 4.3780 4.3515 4.3250	6743.6 6734.2 6724.8 6715.4 6706.0 6687.2 6477.8 6668.4 6658.9	9.7116 +24 9.6535 9.5956 9.5379 9.8806 9.4235 9.3666 9.3100 9.2537 9.1977	409.79 409.50 409.21 408.92 408.63 408.38 408.05 407.76 407.47 407.18	2.3556 + 9 2.3399 2.3242 2.3086 2.2931 2.2776 2.2623 2.2470 2.2318 2.2167	1.7396 - 7 1.7501 1.7607 1.7713 1.7620 1.7928 1.8037 1.8147 1.8257	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
9500 9550 9600 9650 9750 9750 9800 9850 9900	9486 9536 9586 9635 9685 9735 9785 9835 9835	9.7774 9.7772 9.7771 9.7769 9.7768 9.7765 9.7765 9.7763 9.7762 9.7760	4.2987 + 0 4.2726 4.2465 5.2206 4.1948 4.1991 4.1435 4.1180 4.0927 4.0675	6649.5 6640.1 6630.7 6621.3 6611.9 6602.5 6593.1 6583.7 6574.3	9.1419 +24 9.0863 9.0311 8.9761 8.9213 8.8668 8.8126 8.7586 8.7048 8.6514	406.89 406.60 406.31 406.02 405.72 405.43 405.14 404.85 404.26	2.2017 + 9 2.1868 2.1719 2.1571 2.1424 2.1278 2.1133 2.0988 2.0844 2.0701	1.8481 - 7 1.8593 1.8707 1.8822 1.8937 1.9054 1.9171 1.9289 1.9408 1.9528	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
10000 10050 10100 10150 10200 10250 10300 10350 10450	9984 10034 10064 10134 10164 10233 10263 10333 10363 10433	9.7759 9.7757 9.7756 9.7754 9.7753 9.7751 9.7749 9.7748 9.7746 9.7745	h.0424 + 0 h.0175 3.9926 3.9479 3.9433 3.9188 3.8944 3.8701 3.8460 3.8219	6555.4 6546.0 6536.6 6527.2 6517.8 6508.4 6499.0 6489.6 6480.2 6470.7	8.5981 +24 8.5451 8.4924 8.4399 8.3357 8.2840 8.2325 8.1813 8.1303	403.97 403.68 403.38 403.09 402.80 402.50 402.21 401.91 401.62 401.32	2.0559 + 9 2.0418 2.0277 2.0137 1.9998 1.9859 1.9722 1.9585 1.9448 1.9313	1.9649 - 7 1.9771 1.9894 2.0018 2.0142 2.0268 2.0394 2.0522 2.0650 2.0780	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
10500 10550 10600 10450 10750 10750 10800 10800 10900 10950	10483 10533 10582 10632 10682 10732 10782 10881 10881	9.7743 9.7742 9.7740 9.7739 9.7737 9.7736 9.7734 9.7733 9.7731	3.7980 + 0 3.7742 3.7505 3.7270 3.7035 3.6402 3.6569 3.6338 3.6108 3.5879	6461.3 6451.9 6442.5 6433.1 6423.7 6414.3 6404.9 6395.4 6386.0 6376.6	8.0795 +24 8.0290 7.9788 7.9288 7.8790 7.8294 7.7801 7.7311 7.6823 7.6823	401.03 400.73 400.14 400.14 399.85 399.25 398.96 398.66 398.36	1-9178 + 9 1-9044 1-8911 1-8779 1-8547 1-8516 1-8386 1-8256 1-8128 1-8000	2.0910 - 7 2.1042 2.1174 2.1308 2.1443 2.1578 2.1715 2.1853 2.1992 2.2132	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

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TABLE II.—Continued C

	Altit	ude	∘Accel. due to	Specific weight:	Pressure scale	Number density	Particle speed	Collision frequency	Mean free	Molecular weight
	H,m_	Z, m	gravity g,msec*	w, kg m "sec"	height H	n, m	V, m sec⁻¹	ν , sec ⁻¹	L, m	M
Ī	11000 11100 11200	11019 11119 11220	9.7727 9.7724 9.7721	3.5565 + 0 3.5007 3.4458	6363.6 6363.8 6364.0	7.5669 +24 7.4486 7.3320	397.95 397.95 397.95	1.7824 + 9 1.7545 > 1.7270	2.2327 - 7 2.2682 2.3042	28.964 28.964 28.964
	11300 11400 11500	11320 11420 11521	9.7718 9.7715 9.7712	3.3018 3.3387 3.2863	6364.2 6364.4 6364.6	7.2173 7.1044 6.9932	397.95 397.95 397.95	1.7000 1.6734 1.6472	2.3409 2.3781 2.4159	28.964 26.964 28.964
	11600 11700 11800	11621 11722 11822	9.7709 9.7704 9.7753	3.2348 3.1841 3.1342	5364.8 6365.0 6365.2	6.8838 6.7761 6.6701	397.95 397.95 397.95	1.6215 1.5961 1.5711	2.4543 2.4933 2.5329	28.964 28.964 28.964
ļ	11900 12000 12100	11922 12023 12123	9.7697 9.7693	3.0850 3.0347 + 0 2.9891	6365.4 6365.6 6365.8	6.4630 +24	397.95	1.5466	2.5731 2.6140 - 7 2.6556	28.964
+	12200 12300	12223 12324	9:7690 9:7687	2.0422	6366.2	6.3619 6.2624 6.1644	397.95 397.95 397.95	1.4785 1.4751 1.4520	2.6978 2.7407	28.964 28.964 28.964
ŀ	12400 12500	12424	7.7684 7.7681	2.0507	6366.4	6.0680	397.95	1.4293	2.7842	28.964
ŀ	12600	12425	-9.7678	2.8040 2.7420	6366.6	5.9730 5.8796	397.95 397.95	1.4069	2.8285 2.8734	28.964
1	12700 12800	12725 12824	9.7475 9.7672	2.7107	6367.0 6367.2	5.7876 5.6971	397.95 397.95	01-3633 1-3419	2.9191 2.9655	28.964
I	12900	12926	7.7669	2.6342	6367.4	5.6079	397.95	1-3209	3.01,26	28.964
	13000. 13100	13027 13127	7.7666	2.5727 + 0 2.5522	6367.6 6367.8	5.5202 +24 5.4338	397.95 397.95	1.3003 + 9 1.2799	3.0605 - 7 3.1092	28.964
1	13200 13300	13227	9.7660 9.7487	2.5122	6368.0 6368.2	5.3488 5.2651	397.95 397.95	1.2599	3.1586 3.2088	28.964
١	13400 13500	13420	7.7653	2.4541	6368.4 6368.6	5.1828 5.1017	397-95	1.2208	3,2598	28.964
ŀ	13600	13529	9.7450 9.7447	2.3503	6368.8	5.0218	397.95 397.95	1.2017	3.3116 3.3642	28.964
İ	13700 13800	13730 13830	9.7644	2.3214	6369.0 6369.2	4.9433 4.8659	397.95 397.95	1.1644	3.4177 3.4720	28.964
ľ	13900	13930	7.7638	212492	6369.4	4.7898	397.95	1.1282	3.5272	28.964
I	14000	14031 14131	9.7635 9.7632	2c2139: + 9: - 2.1792	4369.6 4369.8	4.7149 +24 4.6411	397.95 397.95	1.1106 + 9	3.5833 - 7 3.6402	28.964
l	14200 14300	14232 14332	9.7629	2.1450	6370.0 6370.2	4.5685 4.4970	397.95 397.95	1.0761 1.0593	3.6981 3.7569	28.964
ŀ	14400	14433 14533	9.7523	2.0763	6370.4 6370.6	4-4267 4-3574	397.95 397.95	1.0427	3.8164 3.8772	28.964
ŀ	14600	14654	7.7616.	2.0137	6370.8	4.2892	397.95	1.0103	3.9388	28.964
Ì	14700 14800 14900	14734 14835 14935	7.7413 7.7410 7.7407	1.9510	6371.0 6371.3 6371.5	4.2221 4.1561 4.0911	397.95 397.95 397.95	9.9452 + 8 9.7896 9.6364	4.0650 4.1297	28.964 28.964 28.964
	15000 15100	15035 15136	9.7404 9.7401	1.8701 + 0	6371.7 6371.9	4.0271 +24 3.9640	397.95 397.95	9.4857 + 8 9.3373	4.1950 - 7 4.2620	28.964 28.964
1	15200	15234	9.7598	1.0315	6372.1	3.9020	397.95	9.1912	4.3297	28.964
ŀ	15300 15400	15337 15437	9.7595 9.7592	1.8028	6372.3 6372.5	3.8410 3.7809	397.95 397.95	9.0474 8.9058	4.3985	28.964
ł	15500 15600	1553 8 1563 8	7.7589	1.7667	6372.7 6372.9	3.7217 3.6635	397.95 397.95	8.7665 8.6293	4.5395 4.6116	28.964
ŀ	15700 15800	15739 15839	9.7583 9.7580	1.4924	6373.1 6373.3	3.6062 3.5498	397.95 397.95	8.4943 8.3614	4.6849	28.964
۱	15900	15940	7.7576	1.4374	4373.5	3.4942	397.95	8.2306	4.8350	28.964
1	16000 16100:	16040	9.7573 9.7570	1.6141 + 0	6373.7 6373.9	3.4396 +24 3.3858	397.95 397.95	8.1019 + 5 7.9751	4.9119 - 7	28.964
ľ	16200	16241	9.7567	1.5630	6374.1	3.3328	397.95	7.8503	5.0592	28.964
١	16300: 16400:	16342. 16442	9.7564	1.5393	6374.3 6374.5	3.2806 3.2293	397.95 397.95	7.7275 7.6066	5.1496 5.2317	28.964
١	16500 16600	16543 16643	9.7558 9.7555	1.4914	6374.7 6374.9	3.1788 3.1291	397.95 397.95	7.4876 7.3705	5.3148 5.3993	28.964
1	16700 16800	16744	9.7552 9.7549	1.4451	6375.1 6375.3	3.0801 3.0319	397.95 397.95	7.2552 7.1416	5.4851 5.5723	28.964
١	16900	14945	9.7546	1.4001	6375,5	2.9845	397.95	7.0299	5.6608	28.964
1	17000 17100	17046	9.7543	1.3702 + 0	6375.7 6375.9	2.9378 +24 2.8918	397.95 397.95	6.9199 + 8 6.8117	5.7508 - 7 5.8422	28.964 28.964
	17200	17146 17247	9.7540	1.3353	6376.1	2.8466	397.95	6.7051	5.9351 ^	28.964
I	17300 17400	17447 17448	9.7535 9.7530	1.3144	6376.3 6376.5	2.802,0 2.7582	397.95 397.95	6-6002 6-4969	6.0294	28.964
	17500 17600	17548	9.7527	1.2735	6376.7 6376.9	2.7151 2.6726	397.95 397.95	6.3953 6.2952	6.2226	28.964 28.964
1	17700 17800	17749 17850 :	9.7521	1.2339	6377.1 6377.3	2.6308 2.5896	397.95 397.95	6.1967	6.4220	28.964
	17900	1795.1	7.7515	1.1955	6377.5	2.5491	397.95	6.0044	6.6277	28.964
	18000 18100	18051 18152	9.7512 9.7509	1.1747 + 0	6377.7 6377.9	2.5092 +24 2.4700	397.95 397.95	5.9104 + 8 5.8179	6.7331 - 7 6.8401	28.964
	16200	18252.	9.7506	1,:1401	6378.1	2.4313	397.95	5.7269	6.9488	28.964
	18300 18400	18353 18453	9.7500	1.1223	6378.3 6378.5	2.3933 2.3558	397.95 397.95	5.6373 5.5491	7.0592 7.1714	28.964
1	18500 18600	18554 18655	9.7494	1.0873	6378.7/ 6378.9	2.3190 2.2827	397.95 397.95	5.4623 5.3769	7.2854 7.4012	28.964
ŀ	18700 18800	18755 18854	9.7490	1.0335	6379.1 6379.3	2.2470 2.2118	397.95 397.95	5.2927 5.2099	7.5188 7.6383	28.964
I	18900	18954	7.7484	1.0207	6379.5	2.1772	397.95	5.1284	7.7597	28.964

TABLE II.—Continued

			٠.٠٠٠	, 1110 AL	IIIODE, ME		··· -	. 4,	
Altitu		Accel: due to gravity	Specific weight	Pressure scale	density.	Particle speed	Collision frequency	Mean free	Molecular weight
Z, m	H, m	gravity g,msec ⁻²	ω, kg:m ⁻⁸ ,sec ⁻⁸	height ∍H _p , m	n, m ^a	⊽, m sec⁻¹	$ u$, sec $^{-1}$	L, m	М
11000 11100 11200 11300 11400 11500 11600 11700 11800 11900	10981 11081 11180 11280 11380 11479 11679 11679 11778 11878	9.7728 9.7725 9.7722 9.7719 9.7716 9.7713 9.7710 9.7706 9.7703 9.7700	3.5651 + 0. 3.5114 3.4526 3.4026 3.3494 3.2471 3.2456 3.1949 3.1430 3.0959	6367.2 6363.8 6364.0 6364.2 6364.4 6364.8 6365.0 6365.2 6365.4	7.5853 +24 7.4713 7.3546 7.2402 7.1273 700162 6.7046 6.7991 6.4932 6.5888	398-07 397-95 397-95 397-95 397-95 397-95 397-95 397-95	1.7872 + 9 1.7599 1.7324 1.705% 1.6788 1.6788 1.6527 1.6269 1.6015 1.5766	2.2273 - 7 2.2613 2.2971 2.3335 2.3704 2.4080 2.4461 2.4846 2.5242 2.5641	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
12000 12100	11977 12077	9.7697	3.0475 + 0 3.0000	4345.4 5345.8	4.4861 +24 4.3850	397.95 397.95	1.5278 + 9	2.6047 - 7 2.6560	28.964
12200 12300 12400 12500 12600 12700 12800 12900	12177 12276 12376 12475 12575 12675 12774 12874	9.7691 9.7688 9.7685 9.7682 9.7679 9.7676 9.7673	2.9531 2.9070 2.8616 2.8169 2.7729 2.7729 2.6870 2.6850	4364.2 4364.4 6364.4 6364.8 6367.0 6367.2 6367.4	6.2855 6.1876 6.0911 5.9962 5.9027 5.8108 5.7202 5.4311	397.95 397.95 397.95 397.95 397.95 397.95 397.95	1.4805 1.4575 1.4548 1.4124 1.5904 1.3687 1.3474 1.3264	2.6879 2.7304 2.7737 2.8176 2.8622 2.9075 2.9535 3.0003	28.964 28.964 28.964 28.964 28.964 28.964 28.964
13000 13100 13200 13300 13300 13500 13500 13600 13700 13800	12973 13073 13173 13272 13372 13471 13571 13671 13770 13870	9-7667 9-7664 9-7660 9-7657 9-7654 9-7648 9-7645 9-7642 9-7639	2.6038 + 0 2.5631 2.5231 2.4837 2.4837 2.4068 2.3692 2.3892 2.3958 2.2000	4147.6 6347.8 4348.0 248.2 248.4 4.0.4 6348.6 6348.6 6349.2 6349.2	5.3433 +24 5.4570 5.3719 5.2832 5.2058 5.1247 5.0449 4.0069 4.0128	397.95 397.95 397.95 397.95 397.95 397.95 397.95 397.95	1.3057 + 9 1.2854 1.2654 1.2256 1.2262 1.2071 1.1883 1.1698 1.1516	3.0477 - 7 3.0940 3.1450 3.1948 3.2453 3.2967 3.3489 3.4019 3.4557 3.5104	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
14000 14100 14200 14300 14400 14500 14500 14700 14800 14900	13969 14069 14168 14268 14367 14467 14567 14566 14766 14865	9.7636 9.7633 9.7630 9.7627 9.7624 9.7621 9.7618 9.7614 9.7611 9.7608	2.2247 + 0 2.1900 2.1558 2.1221 2.0890 2.0564 2.0243 1.9927 1.9616	6369.6 6369.8 6370.0 6370.2 6370.6 6370.6 6371.2 6371.2	4.7378 +24 4.6640 4.5914 4.5198 4.4494 4.3801 4.3801 4.119 4.2448 4.1767 4.1736	397.95 397.95 397.95 397.95 397.95 397.95 397.95 397.95	1-1160 + 9 1-0986 1-0815 1-0646 1-0481 1-0317 1-0157 9-985 + 8 9-8428	3.5659 - 7 3.6223 3.6797 3.7379 3.7379 3.8571 3.9181 3.9801 4.0431 4.1070	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
15000 15100 15200 15300 15400 15600 15600 15600 15600	14965 15064 15164 15263 15363 15462 15562 15561 15761 15860	9.7605 9.7602 9.7599 9.7596 9.7593 9.7590 9.7587 9.7584 9.7581 9.7578	1.9009 + 0 1.8713 1.84211 1.9135 1.7850 1.7572 1.7298 1.7028 1.6762 1.6762	6371.6 6371.8 6372.0 6372.2 6372.4 6372.6 6373.0 6373.2	4.6495 +24 3.9845 3.9244 3.8633 3.8033 3.7139 3.6856 3.6283 3.5718 3.5162	397.95 397.95 397.95 397.95 397.95 397.95 397.95 397.95 397.95	9.5386 + 8 9.3901 9.2439 9.1000 8.9583 8.8188 8.6815 8.5463 8.4133 8.2823	4.1720 - 7 4.2380 4.3050 4.3731 4.423 4.5125 4.5839 4.6564 4.7301 4.8049	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
16000 16100 16200 16300 16400 16500 16600 16700 16800	15960 16059 16159 16258 16358 16457 16557 16556 16756 16855	9.7575 9.7572 9.7569 9.7565 9.7562 9.7559 9.7556 9.7553 9.7550 9.7557	1.6243 + 0 1.5990 1.55741 1.5495 1.5253 7.5015 1.4781 1.4551 1.4324 1.4101	6373.8 6374.0 6374.2 6374.4 6374.6 6374.8 6575.0 6375.2	3.4614 +24 3.4075 3.3545 3.3023 3.2509 3.2003 3.1505 3.1014 3.0532 3.0056	397.95 397.95 397.95 397.95 397.95 397.95 397.95 397.95 397.95	8.1533 + 8 8.0264 7.9015 7.17785 7.6574 7.5382 7.4209 7.3054 7.1917 7.0798	4.8808 - 7 4.9580 5.0364 5.1161 5.1969 5.2791 5.3626 5.4474 5.5335 5.6210	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
17000 17100 17200 17300 17400 17500 17600 17600 17600	16955 17054 17154 17253 17352 17452 17551 17651 17750 17850	9.7544 9.7541 9.7538 9.7535 9.7532 9.7529 9.7526 9.7523 9.7520 9.7516	1.3861 + 0 1.3664 1.3851 1.3241 1.3035 1.2832 1.2632 1.2435 1.2241 1.2050	6375.6 6375.8 6376.0 6376.4 6376.6 6376.8 6377.0 6377.2 6377.4	2.9589 +24 2.9128 2.8675 2.8229 2.7357 2.6931 2.6512 2.65100 2.5694	397.95 397.95 397.95 397.95 397.95 397.95 397.95 397.95 397.95	6.9696 + 8 6.8611 6.7544 6.6492 6.5458 6.4439 6.3437 6.2450 6.1478 6.0521	5.7098 - 7 5.8001 5.8918 5.9849 6.0795 6.1756 6.2732 6.3724 6.4731 6.5754	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
18000 18100 18200 18300 18400 18500 18600 18700 18900	17949 18049 18148 18247 18347 18446 18546 18645 18645	9.7513 9.7510 9.7507 9.7504 9.7501 9.7498 9.7495 9.7492 9.7489 9.7486	1.1862 + 0 1.1677 1.1875 1.316 1.1180 1.07966 1.0795 1.0627 1.0861	6377.8 6377.8 6378.0 6378.2 6378.4 6378.6 6379.0 6379.0	2.5294 +24 2.4901 2.4513 2.4132 2.3756 2.3387 2.3023 2.2665 2.2312 2.1965	397.95 397.95 397.95 397.95 397.95 397.95 397.95 397.95 397.95	5.9580 + 8 5.8653 5.7740 5.6842 5.5958 5.5088 5.4231 5.4231 5.2557 5.1739	6.6793 - 7 6.7849 6.8921 7.0010 7.1116 7.2240 7.3381 7.4541 7.5718 7.6915	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

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GEOPOTENTIAL ALTITUDE, METRIC UNITS $^{\circ}$

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1		.e.	Accel.		Pressure	SM to the last	0. 454	• 01.1.		h
ŀ	Aitit	rude	due to	Specific weight	scale		Particle	Collision	Mean free	
L				weight		density	speed	frequency	path	weight
ŀ		Z, m	gravity	ka m²ooo-8	height	n, m ⁻¹	⊽, m sec⁻¹	ν , sec ⁻¹	L, m	М
L	H, m	∠, m₁	a_msec ⁻²	ω, kg m ² sec ²	H _p , m	11, 111	V, 111 360.	v, sec	[L., 176	- IVI
Ł					<u> </u>				 	_
١	19000	19057	9.7481	1.0047 + 0	6379.7	2.1432 +24	397.95	5.0482 + 8	7.8831 - 7	28.964
ŀ	19100	19158	9.7478	9.8900 - 1	6379.9	2.1096	397.95	4.9692	8.0084	28.964
ı	19200	19258	9.7475	9.7349	6380.1	2.0766 2.0441	397.95	4.8915	8.1356	23.964
ľ	19300	19359	9.7472	9.5823	6380.3	2.0441	397.95	4.8149	8.2650	28.964
l	19400 19500	19459 19560	9.7469	9.4321 9.2842	6380.5 6380.7	2.0122 1.9807	397.95 397.95	4.7396 4.6654	8.3963 8.5298	28.964
1	19600	19661	9.7463	9.1387	6380.9	1.9497	397.95	4.5925	8-6653	28.964
ŀ	19700	19761	9.7460	8.9954	6381.1	1.9192	397.95	4.5206	8.8031	28.964
ľ	19800	19862	9.7456	8.8544	6381.3	1.8892	397.95	4.4499	8.9430	28.964
ľ	19900	19963	9.7453	8.7156	6381.5	1-8596	397.95	4.3803	9.0851	28.964
l.	20000	20043	9.7450	8.57901	6381.7	1.8305 424	397.95	h 3119 + A	9.2295 - 7	28.964
1	20100	20164	9.7447	8.4406	4384.9	1.8010	398.04	4.2433	9.3805	28.964
ľ	20200	20264	9.7444	8.3046	6384.9 6388.0	1.7721	398.14-	4.1760	9.5339	28.964
ı	20300	20365	9.7441	8.1708	6391.2	1.7436	398.23	4.1098	9.6897	28.964
ı	20400	20466	9.7438	8.0392	6394.3	1.7155	398.32	4.0447	9.8480	28.964
Į.	20500 20600	20565 20667	9.7435	7.9098 7.7825	6397.5 6400.6	1.6880	398.41 398.50	3.9806 3.9176	1.0009 = 6	28.964
ľ	20700	20768	9.7429	7.6574	6403.7	1.6342	398.59	3.8556	1.0338	28.964
ı	20800	20868	9.7426	7.5343	6406.9	1.6080	398.69	3.7946	1.0507	28.964
ı	20900.	20969	9.7423	7.4132	6410.0	1.5822	398.78	3.7346	1.0678	28.964
ŀ	21000	21070	0 71-00	7 2061 1	6413.2	1.5568 +24	398.87	3.6756 + 8	1.0852 - 6	28.964
۱	21100	21170	9.7420	7.2941 - 1 7.1770	6416.3	1.5368 +24	398.96	3.6175	1.1029	28.964
1	21200	21271	9.7413	7.0619	6419.5	1.5074	399.05	3.5604	1 1 1 208	28.764
Į.	21300.	21372	9.7410	6.9486	6422.6	1.4832	399.14	3.5042	1:- 139.0	28.964
l	21400	21472.	9.7407	6.8372	6425.8 6428.9	1.4595	399.24	T LLRO	1.1390 1.1576 1.1764	28.964
ŀ	21500	21573	9.7404	6.7277	6428.9	1-4362	399.33	3.3946	1 1-1764	28.964
ŀ	21400	21674 21774	9.7401	6.5139	6432.1 6435.2	1.4132 1.3906	399.42 399.51	3.3946 3.3411 3.2884	1.1955	28.964
l	21800	21875	9.7395	6.4097	6438.4	1.3684	399.60	3.2366	1.2386	28.964
ŀ	21900	21976	9.7392	6.3072	6441.5	1.3466	399.69	3.1857	1.2546	28.964
l			1	ľ			13		1:	
ľ	22000	22076	9.7389	6.2063 - 1 6.1071	6544.7	1.3251 +24	399.78 399.88 399.97	3.1356 + 8 3.0863	1.2750 - 6 1.2957 1.3166 1.3380	28.964
ļ,	22100 [,] 22200	22177 22278	9.7386 9.7383	6.0096	6447.8 6451.0	1.3039 1.2032	300.07		1.3144	28.964
ĺ.	22300	22379	9.7380	5.9136	6454.1	1.2627	900.06	2.9900	1.3380	28.964
ŀ	22300 22400 22500	22479	9.7376	5.8192	6454.1 6457.3 6460.5 6463.6 6466.8	1.2426	400.06 400.15 400.24	2.9900 2.9431 2.8969 2.8514 2.8067 2.7627	1.3596	28.964
] .	22500	22580	9.7376	5.8192 5.7264	6460.5	1-2426	400.24	2.8969	1.3816	28.964
l	22600 22700	22681	9.7370	5.6351	6463.6	. 1.2034	400.35	2.8514	1.4040	28.964
ŀ	22700	22781	9.7364	5.5453 5.4570	6469.9	1.1842 1.1654	400.42 400.51	2.8007	1.4497	28.764
l	22900	22983	9.7361	5.3701	6473.1	1.1469	400.61	2.7194	1.4751	28.964
į	` "		1		,			: '		
ı	23000	23084	9.7358	5.2846 - 1	6476.2 6479.4 6482.5	1.1286 +24 1.1107	400.70	2.6769 + 8	1-4969 - 6	28.964
ı	23100 23200	23184 23265	9.7355 9.7352	5.2005 5.1178	. 04/Y.4	1.0931	400.79	2.6350 2.5937	1.5210	28.964
l	23300	23384	9.7349	5.0365	6485.7	1.0758	400.97	2.5532	1.5705	28.964
L	23400	23466	9.7346	4.9565	6488.8	1.0587	401.06	2.5132	1.5705	28.964
l	23500	23587	9.7343	4.8778	6492.0 6495.1	1.0587	401.15	2.5532 2.5132 2.4740	1.6215 1.6476 1.6741	28.964
ŀ	23400	23608	9.7340	4.8003	6495.1	1.0254	401.24	2.4353	1.6476	28.964
l	23700	23789	9.7337	4.7242	6498.3	1.0092	401.34	2.3973	1.6741	28.964
ŀ	23800 23900	23889 23990	9.7333	4.6493 4.5756	6501.4 6504.6	9.9320 +23 9.7749	401.43	2.3599 2.3231	1.7010	28.964
l		ľ	1		•		l .	i:		
١	24000	24091	9.7327	4.5031 - 1 4.4317	6507.8	9-6203 +23	401-61	2.2869 + 8	1-7561 - 6	28.964
١	24100	24192	9.7324	4.4317	6510.9	9.4683	401.70	2.2512	1.7843	28.964
ŀ	24200 24300	24292 24393	9.7321	4.3616 4.2926	6514.1	9.3187 9.1715	401.79	2.2162 2.1817	1.8130	28.964
l	24400	24373	9.7315	4.2247	6520.4	9.0268	401.97	2.1477	9716	28.964
ŀ	24500	24595	9.7312	4.1579	6523.5	8.8843	402.06	2.1143	1.9016	28.964
١	24600	24696	9.7309	4.0922	6526.7	867442	402.15	2.0814	1:9321	28.964
l	24700	24796	9.7306	4.0276	6529.8	8.6064	402.25	2.0491	1-9630	28.964
ŀ	24800	24897	9.7303	3.9640	6533.0	8.4708	402.34 402.43	2.0173 1.9859	1.9945 2.0264	28.964
l	24900	24998	9.7300	3.9014	6536.2	8.3374	402,43	1.7037	2.0204	28.964
١	25000	25079	9.7297	3.8399 - 1	6539.3	8.2061 +23	402.52	1.9551 + 8	2.0588 - 6	28.964
l	25100	25200	9.7293	3.7793	6542.5	8-0770	402.61	1.9248	2.0917	28.964
	25200	25300	9.7290	3.7198	6545.6	7-9499	402.70	1.8949	2.1251	28.964
ŀ	25300 25400	25401 25502	9.7287	3.6612	6551.9	7.8249 7.7020	402.79 402.88	1.8656 1.8367	2.1591 2.1935	28.964
١	25500	25603	9.7281	3.5%68	6555.1	7.5810	402.97	1.8082	2.1735	28.964
ĺ	25600	25704	9.7278	3.4910	6558.3	7.4620	403.06	1.7802	2.2641	28.964
١	25700	25804	9.7275	3.4361	6561.4	7:3449	F03.15	1.7527	2.3002	28.964
ĺ	25800	25905	9.7272	3.3821	6564.6	7.2297	403.24	1.7256	2.3369	28.964
١	25900	26006	9.7269	3.3290	6567.7	71163	403,33	1.6989	2.3741	28.964
ĺ	26000	,26107	9.7266	3.2767 - 1	6570.9	7.0048 +23	403.42	1.6727 + 8	2.4119 - 6	28.964
١	26100	26208	9.7263	3.2253	6574.0	6.8950	403.52	1.6468	2.4503	28.964
١	24200	26308	9.7260	3.1747	6577.2	6.7871	403.61	1.6214	2.4892	28,964
ŀ	24300	26409	9.7257	3.1249	6580.4	6.6808	403.70	1.5964	2.5288	28.964
	26400	26510	9.7254	3.0759	6583.5	6.5763	403.79	1.5718	2.5690	28.964
ı	26500	26611 26712	9.7250 9.7247	3.0277 2.9803	6586.7 6589.6	6.4735	403.08	1.5475	2.6098 2.6513	28.964
١		1 40114				6.2727	404.06	1.5002	2.6933	28.964
	26600 26700	26813	9.7244	1 2.7330						
	26600 26700 26800	26813 26913 27014	9.7244	2.9356 2.8877	6593.0 6596.2 6599.3	6.1748	404.15	1.4771	2.7361	28.964

4			1					· - 5)		
	Altit	ude	Accel. due to	Specific : weight	Pressure scale	Number	Particle speed	Collision frequency	Mean free path	Molecular weight
	Z, m	H, m	g,msec ⁻²	weight ω,kg m²sec²	height H _p , m		⊽, m sec⁻¹	ν , sec ⁻¹	L, m	M
	19000 19100 19200 19300 19400 19500 19600 19700 19800 19900	18943 19043 19142 19242 19341 19440 19540 19639 19739 19838	9.7483 9.7480 9.7477 9.7474 9.7471 9.7468 9.7464 9.7461 9.7455	1.0138 + 0 9.9798 - 1 9.8243 9.6712 9.5205 9.3722 9.2261 9.0824 8.9409 8.8016	6379.6 6379.6 6380.0 6380.2 6380.4 6380.6 6381.0 6381.2 6381.4	2.1624 +24 2.1287 2.0556 2.0631 2.0310 1.9994 1.9683 1.9377 1.9076 1.8779	397.95 397.95 397.95 397.95 397.95 397.95 397.95 397.95	5.0935 + 8 5.01%2 4.9363 4.8595 4.7839 4.7095 4.6363 4.5642 4.4932 4.4932	7.8130 - 7 7.9364 8.0618 6.1892 9.3185 8.4499 8.5834 8.7190 8.8567 8.9966	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	20000 20100 20200 20300 20400 20500 20600 20700 20800 20900	19937 20037 20136 20235 20335 20434 20533 20633 20732 20832	9.7452 9.7449 9.7446 9.7443 9.7437 9.7437 9.7431 9.7431 9.7428 9.7425	8.6645 - 1 8.5280 8.3914 8.2570 8.1248 7.9948 7.8670 7.7412 7.6176 7.4959	6381.6 6382.9 6386.0 6389.1 6392.2 6395.4 6398.5 6401.6 6404.8 6407.9	1.8487 +24 1.8197 1.7906 1.7619 1.7338 1.7061 1.6789 1.6521 1.6257 1.5998	397.95 397.99 398.08 398.17 398.26 398.35 398.44 398.53 398.62 398.71	8.3546 + 80 4.2865 4.2189 4.1525 4.0871 4.0227 3.9594 3.8971 3.8359 3.7756	9.1387 ~ 7 9.2845 9.4354 9.5887 9.7025 1.0063 ~ 6 1.0226 1.0392 1.0560	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
*	21000 21100 21200 21300 21400 21500 21600 21700 21900	20931 21030 21130 21229 21328 21428 21527 21626 21725 21825	9.7422 9.7419 9.7416 9.7413 9.7409 9.7403 9.7400 9.7397 9.7394	7.3763 - 1 7.2586 7.1428 7.0290 6.9170 6.8069 6.6986 6.5920 6.4872 6.3841	6411.0 6414.1 6417.3 6420.4 6423.5 6426.7 6429.8 6432.9 6436.0 6439.2	1.5743 +24 1.5893 1.5246 1.5004 1.4765 1.4530 1.4300 1.4073 1.3849	398.81 398.90 398.99 399.08 399.17 399.26 399.35 399.44 399.53 399.62	3.7163 + 8 3.6580 3.6006 3.5441 3.4885 3.4839 3.3801 3.3272 3.2751 3.2239	1.0731 - 6 1.0905 1.1081 1.1260 1.1442 1.1627 1.1815 1.2005 1.2199	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	22000 22100 22200 22300 22400 22500 22600 22700 22800 22900	21924 22023 22123 22222 22321 22421 22520 22619 22719 22818	9.7391 9.7388 9.7385 9.7382 9.7379 9.7376 9.7373 9.7370 9.7367	6.2827 - 1 6.1829 6.0848 5.9883 5.8934 5.8000 5.7081 5.6177 5.5288 5.414	6452.3 6455.4 6451.7 6451.8 6457.9 6461.1 6464.2 6467.3 6470.5	1.3414 +24 1.3201 1.2992 1.2786 1.2584 1.2385 1.2189 1.1997 1.1807	399.71 399.81 399.90 399.99 400.08 400.17 400.26 400.35 400.44 400.53	3.1735 + 8 3.1240 3.0752 3.0272 2.9800 2.9335 2.8878 2.8428 2.7985 2.7550	1.2595 - 6 1.2796 1.3004 1.3213 1.3326 1.3461 1.3860 1.4083 1.4309 1.4538	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	23000 23100 23200 23300 23400 23500 23600 23700 23800 23900	22917 23016 23116 23215 23314 23413 23513 23612 23711 23810	9.7361 9.7358 9.7354 9.7351 9.7345 9.7345 9.7342 9.7339 9.7336 9.7333	5.3554 - 1 5.2708 5.1875 5.1056 5.0251 4.9458 4.8679 4.77912 4.7157 4.6415	6473.6 6476.7 6479.9 6483.0 6486.1 6489.2 6492.4 6495.5 6498.6 6501.8	1.1437 +24 1.1257 1.1080 1.0905 1.0733 1.0564 1.0398 1.0235 1.0074 9.9155 +23	400.62 400.71 400.80 400.89 400.98 401.07 401.16 401.35 401.44	2.7121 + 8 2.6700 2.6285 2.5876 2.5875 2.5579 2.8690 2.8308 2.3931 2.3560	1.8772 - 6 1.5008 1.5289 1.5289 1.55780 1.5790 1.5992 1.6248 1.6577 1.6771	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	24000 24100 24200 24300 24400 24500 24600 24700 24800 24900	23910 24009 24108 24207 24307 24506 24505 24604 24704 24803	9.7330 9.7327 9.7324 9.7321 9.7318 9.7315 9.7312 9.7309 9.7306 9.7303	4.5685 - 1 4.4966 4.4259 4.3564 4.2880 4.2207 4.1545 4.0893 4.0252 3.9622	6504.9 6508.0 6511.2 6514.3 6517.4 6520.6 6523.7 6526.8 6530.0 6533.1	9.7598 +23 9.6066 9.4559 9.3076 9.1618 9.0182 8.8770 8.7381 8.6014 8.4670	401.53 401.62 401.71 401.89 401.98 402.07 402.16 402.25 402.34	2.3196 + 8 2.2837 2.2483 2.2136 2.1794 2.1157 2.1126 2.0800 2.0479 2.0164	1.7310 - 6 1.7587 1.7567 1.8151 1.8840 1.8734 1.9032 1.9334 1.9042	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	25000 25100 25200 25300 25400 25500 25600 25700 25800 25900	24902 25001 25100 25200 25299 25398 25497 25597 25696 25795	9.7300 9.7297 9.7293 9.7290 9.7287 9.7284 9.7278 9.7275 9.7272	3.9001 - 1 3.8391 3.7790 3.7200 3.6618 3.6046 3.5483 3.4930 3.4385 3.4385 3.3849	6536.2 6539.4 6542.5 6545.6 6548.7 6551.9 6558.1 6561.3 6564.4	8.33% +23 8.20%5 8.076% 7.9503 7.8263 7.70%3 7.58%2 7.4661 7.3%99 7.2355	402.43 402.52 402.61 402.70 402.79 402.97 403.06 403.15 403.24	1.9353 + 8. 1.9547 1.9546 1.8950 1.8352 1.8372 1.8090 1.7812 1.7539	2.0270 - 6 2.0592 2.0919 2.1250 2.1587 2.1929 2.2276 2.2628 2.2986 2.3350	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
0	26000 26100 26200 26300 26400 26500 26600 26700 26900	25894 25993 26092 26192 26291 26390 26489 26588 26687 26787	9.7269 9.7266 9.7263 9.7260 9.7257 9.7254 9.7251 9.7243 9.7245 9.7242	3.3321 - 1 3.2802 3.2291 3.1789 3.1294 3.0808 3.0329 2.9858 2.9394 2.8938	6567.5 6570.7 6573.8 6576.9 6580.1 6583.2 6586.3 6589.5 6592.6	7.1230 +23 7.0122 6.9033 6.7961 6.6905 6.5867 6.4686 6.3840 6.2851 6.1878	403.42 403.51 403.69 403.78 403.87 403.96 403.96	1.7005 + 8 1.67%% 1.6488 1.0235 1.5987 1.57%2 1.5501 1.5264 1.5031 1.4802	2.3719 - 6 2.4093 2.4473 2.4860 2.5252 2.5650 2.6054 2.6460 2.6860 2.7303	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

Altit	ude	Accel.		Pressure scale	Number density	Porticle speed	Collision frequency	Mean free	Molecular weight
H, m	Z, m	gravity g, msec ⁻²	ω, kg m ⁻² sec ⁻²	height H _P , m	n, m ⁻⁸	⊽, m sec⁻¹	ν, sec c	L, m	M
27000 27100 27200 27300 27400 27500 27600 27700 27800 27900	27115 27216 27317 27318 27519 27620 27720 27821 27922 28023	9.7235 9.7232 9.7229 9.7226 9.7223 9.7220 9.7217 9.7217 9.7211 9.7207	2.7981 - 1 2.7544 2.7114 2.6690 2.6274 2.5864 2.5461 2.5064 2.4673 2.4289	6602.5 6608.8 6612.0 6615.1 6618.3 6621.5 6624.6 6627.8 6630.9	5.9836 +23 5.8902 5.7984 5.7081 5.6192 5.5317 5.4456 5.34609 5.2775 5.1955	404.33 404.42 404.51 404.60 404.69 404.87 404.96 405.05 405.14	1.4320 + 8 1.4100 1.3683 1.3670 1.3460 1.3253 1.3050 1.2653 1.2653	2.8235 - 6 2.8682 2.9137 2.9598 3.0066 3.0582 3.1028 3.1515 3.2012 3.2518	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
28000 28100 28100 28200 28500 28500 28500 28600 28700 28900	28124 28225 28326 26427 28527 28628 28729 28830 28931 29032	9-7204 9-7201 9-7198 9-7195 9-7195 9-7189 9-7186 9-7183 9-7180 9-7177	2.3911 ~ 1 2.3539 2.3173 2.2613 2.2458 2.2109 2.1766 2.1428 2.1096 2.0769	0634.1 6637.3 6640.4 6643.6 6646.8 6649.9 6655.1 6655.3 6659.4	5.1146 +23 5.0354 4.9572 4.8047 4.7302 4.6569 4.5546 4.5138 4.4440	405.23 405.32 405.41 405.50 405.59 405.77 405.86 405.77	1.2268 + 6 1.2080 1.1096	3.3031 * 6 3.3552 3.4081 3.4081 3.5163 3.5717 3.6279 3.6279 3.6849 3.7429 3.8017	28.764 28.964 28.964 28.964 28.964 28.964 28.964 28.964
29000 29100 29200 29300 29400 29500 29600 29800 29800	29133 29234 29335 29436 29538 29538 29738 29839 29840 30041	9.7174 9.7171 9.7167 9.7164 9.7164 9.7158 9.7155 9.7155 9.7152 9.7149 9.7146	2.0447 - 1 2.0130 1.9819 1.9512 1.9210 1.8913 1.8621 1.8333 1.8050 1.7771	6665.7 6668.9 6672.1 6675.2 6675.4 6681.6 6684.7 6687.9 6691.3	4.3752 +23 4.3076 4.2411 4.1755 4.1111 4.0476 3.9852 3.9238 3.8633 3.8633	406.13 406.22 406.31 406.40 406.49 406.58 -06.67 406.85 406.85	1.0518 + 8 1.0357 1.0250 1.0044 9.8914 + 7 9.7919 9.5928 9.4470 9.3035 9.1622	3.8614 - 6 3.9220 3.9836 4.0461 4.1095 4.1740 9.2293 4.3057 4.3731	28.764 28.764 28.764 28.764 28.764 28.764 28.764 28.764
30000 30100 30200 30300 30400 30500 30600 30700 30800 30900	30142 30243 30344 30445 30546 30647 30748 30849 30950 31051	9-7143 9-7140 9-7137 9-7134 9-7131 9-7128 9-7124 9-7121 9-7113 9-7115	1.7497 - 1 1.7227 1.6962 1.6700 1.6443 1.6196 1.5941 1.5566 1.5554	6697.4 6700.6 6703.7 6706.9 6710.1 6713.2 6716.6 6712.7 6722.7	3.7552 +23 3.6876 3.6578 3.5750 3.5750 3.4660 3.4127 3.3603 3.3603 3.2580	407.03 407.12 407.21 407.30 407.39 407.57 407.66 407.75 407.84	9.0231 + 7 8.8862 8.7514 8.4187 6.4881 8.3595 8.2230 8.1084 7.9857	4.5110 46 4.5815 4.4531 4.7258 4.7296 4.8744 4.9505 5.0277 5.1040 5.1855	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
31000 31100 31200 31300 31400 31500 31600 31700 31800 31900	31152 31253 31354 31455 31556 31657 31758 31859 31960 32061	9.7112 9.7109 9.7106 9.7103 9.7100 9.7097 9.7094 9.7091 9.7088 9.7085	1.4983 - 1 1.4753 1.4527 1.4304 1.4084 1.3869 1.3556 1.3347 1.3241 1.3038	6729.1 6732.2 6735.4 6738.6 6741.8 6744.9 6748.1 6751.3 6754.4 6757.6	3.2081 +23 3.1589 3.1058 3.0629 3.0160 2.9699 2.9245 2.8798 2.8358 2.8358	407.93 408.02 408.11 408.20 408.29 408.38 408.47 408.65 408.65	7-7461 + 7 7-6290 7-5138 7-5004 7-2888 7-1786 7-0706 6-9641 6-8592 6-7559	5.2663 - 6 5.3482 5.4314 5.5159 5.6016 5.6886 5.7770 5.8666 5.9576 6.0500	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
32000 32200 32400 32600 32800 33000 33200 33400 33600 33800	32162 32364 32566 32768 32970 33172 33374 33576 33779 33981	9.7082 9.7075 9.7069 9.7063 9.7057 9.7051 9.7045 9.7039 9.7032 9.7032	1.2839 -01 1.2430 1.2035 1.165h 1.1286 1.0930 1.0586 1.025h 9.9326 - 2	6760.8 6777.8 6794.7 6811.7 6828.7 6845.7 6862.7 6879.7 6976.7 6913.7	2.7499 +23 2.6625 2.5781 2.4966 2.4176 2.3417 2.2682 2.1971 2.1285 2.0621	408.82 409.32 409.82 410.32 410.82 411.32 411.82 412.31 412.31	6.65%2 + 7 6.4507 6.2538 6.063% 5.8793 5.7011 5.5288 5.3621 5.2008 5.0%7	6.1438 - 6 6.3455 6.5532 6.7672 6.9876 7.2147 7.4486 7.6895 7.9375 8.1929	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
34000 34200 34400 34600 35000 35200 35400 35600 35600	34183 34385 34587 34789 34992 35194 35396 35598 35801 36003	9-7020 9-7014 9-7008 9-7002 9-6996 9-6989 9-6983 9-6977 9-6971	9.3225 - 2 9.0327 8.7525 8.4816 8.2198 7.9666 7.7218 7.4850 7.2561 7.0346	693G.T 694T.7 6964.8 6988.8 7015.8 7032.8 7049.8 7046.9 7083.9	1.9980 +23 1.9360 1.8760 1.8181 1.7621 1.7079 1.6555 1.6049 1.5559	413.80 114.29 115.28 115.77 116.27 116.76 117.25 117.74 118.23	4.8936 + 7 4.7474 4.6059 4.4690 4.3364 4.2081 6.0839 3.9436 3.8471 3.7343	8.4559 - 6 8.7267 9.0055 9.2925 9.5879 9.8920 1.0205 - 5 1.0527 1.0859 1.1200	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
36000 36200 36460 36800 37000 37200 37400 37600 37800	36205 36407 36610 36812 37014 37217 37419 37621 37624 38026	9-6959 9-6953 9-6946 9-6940 9-6934 9-6928 9-6922 9-6916 9-6904	6.820% - 2 6.6132 6.4128 6.2189 6.0313 5.8%97 5.67%0 5.50%0 5.339%	7100.9 7117.9 7135.0 7152.0 7169.1 7186.1 7203.1 7220.2 7237.2 7254.3	1.4627 +23 1.4183 1.3754 1.3339 1.2937 1.2549 1.2173 1.1809 1.1456 1.1115	418.72 19.21 119.69 420.18 420.67 421.15 421.64 122.12 422.61 423.09	3.6251 + 7 3.5193 3.4168 3.3175 3.2214 3.1282 3.0379 2.9505 2.8657 2.7836	1.1551 - 5 1.1912 1.2263 1.2666 1.3059 1.3463 1.3879 1.4507 1.4507 1.4747	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE II.-Continued

Ann	ude	Accel.	Specific weight	Pressure scale	Number density	Particle speed	Collision frequency	Mean free	Molecul weight
, m	H, m	gravity g.msec ⁻²	ω, kg: m ⁻² sec ⁻²	height H _p , m	n, m ⁻³	V, m sec"	ν, sec ⁻¹	L, m	M
27000	26886	9.7239	2-8489 - 1	6598.9	6.0920 +23	404.23	1.4576 + 8	2.7733 - 6	28.96
27100	26985	9.7236	2.8048	6602.0	5.0977	404.32	1.4354	2.8168	28.96
27200	27084	9.7233	2.7613	6605.1	5.9050	404.41	1.4735	2.8611	28.96
27300	27183	9.7229	2.7185	6608.3	5.8137	404.50	1.3919	2.9060	28.96
27400	27282 27382	9.7226	2.6764 - 2.6350	- 6611,4 6614.5	5.7239 5.6355	404.58	1.3707 1.3499	2.9516 2.9979	28.96
27400	27481	9.7220	2.5943	6617.7	5.5485	404.76	1.3293	3.0449	28.96
27700	27589	9.7217	2.5542	6620.8	5.4629	404.85	1.3091	3.0926	28.96
27800	27679	9.7214	265147	662%.0	5.3784	404.94	1.2892	3:3411	28.96
27.900	27778	9.7211	2-4758	5,627.1	, 5.2957	405.03	1.2696	3.1903	28.96
28000 28100	27877 27976	9.7208	2.4374 - 1 2.4000	6633.4	5.2141 ±23	405.12 405.21	1.2503 + 8	3.2402 - 6 3.2909	28.96 28.96
28200	28075	9.7202	2.3630	6636.5	5.0548	405.30	1.2126	3.3423	28.96
28300 j	28175	9.7199	2.3266	6639.6	4.9770	405,39	1.1942	3.3945	28.96
28400	28274	9.7196	2.2907	6642.8	4.9005	405.48	1-1761	3.4476	28.96
28500 28600	28373 28472	9.7193	2.2554 2.2207	6645.9	4.8251 4.7510	405.57	1.1583	3.5014 3.5560	28.96
28700	28571	9.7187	2.1865	6652.2	4.6780	405.75	1.1235	3.6115	28.96
28800 [28670	9.7184	2.1529	6655.3	4.6062	405.84	1.1065	3.6678	28.96
8900	28769	9.7181	2.1178	.6658.4	4.5356	405.93	1.0898	3.7249	28.96
29000 ° 29100	28868 28967	9.7178	2.0872 - 1 2.0552	6664.7	4.4660 +23 4.3976	406.01	1.0733 + 8	3.7829 - 6 3.8418	28.96
9200	29066	9.7172	2.0236	6667.8	4.3302	406.19	1.0411	3.9016	28.96
29300 [29166	9.7169	1.9926	667-1-0	4.2639	106.28	1.0254	3.9623	20.96
9500	29265 29364	9.7166	1.9420	6674.1	4.1986 4.1344	406.37	1.0099	4.0239 4.0864	28.96
9600	29463	9.7159	1.9023	6680.4	4.0711	404.55	9.7967	4.1499	28.96
9700	29562	9.7156	1.0732	6683.5	¥.0089	406.64	9.6490	4.2143	28.96
29900	29661 29760	9.7153	1.8165	6686.7	3.9477 3.8874	406.73	9.5037 9.3606	4.2797 4.3460	28.96
10000	29859	9.7147	1.7885 - 1	6692.9	3.8280 +23	404.91	9.2197 + 7	4.4134 - 6	28.96
30100	29958	9.7144	1.7612	6696.1	3.7696	404.99	9.0811	4.4818	28.96
0200	30057	9.7141	1-7342	6699.2	3.7121	407-08	8.9445	4.5512	28.96
0300	30154 30255	9.7138	1.7078	6702-3	3.6555 3.5998	407.17	8.0101 6.6778	4.6216 4.6932	28.96
0500	30354	9.7132	1.4540	6708.4	3.5450	407.35	8.5475	4.7657	28.96
30400	30453	9.7129	1.4300	6711.8	3.4911	407.44	8.4192	4.8394	28.96
10700	30552	9.7126	1.4059	6714.9	3.4380	407.53	8.2929	4.9142	20.76
10800	30451	9.7123 9.7120	1.5814	6718.0	3.3857 3.3342	407.62	8.1686 8.0462	5-9901 5-0671	28.96
31000	30850	9.7117	1.5336 - 1	6724.3	3.2835 +23	407.79	7.9256 + 7	.5.1453 6	28.96
1100	30949	9.7114	1.5103	6727.4	3.2337	407.88	7.8070	5.2246	28.96
1200	31048	9.7111	1.4073	6730.4	3.1846	407.97	7.6901	5.3051	28.96
51300 51400	31147 31246	9.7108	1.464? 1.4424 ~	6733.7	3.1363 3.0887	108.06	7.5751	5.3869 5.4698	28.96
11500	31345	9.7102	1.4205		3.0419	408.24	7.3503	5.5540	28.96
1000	31444	9.7099	1.3990	6743.1	2.9958	408.33	7.2405	5.6394	28.96
11700	31543	9.7094	1.3777	6746.3	2.9504	408.42	7.1324	5.7262	28.96
11800	31442 31741	9.7093	1.3568	6749.4	2.9058 2.8618	408.50 408.59	7.0260 6.9212	5.8142 5.9035	28.96
2000	31,840	9.7086	1.3160 - 1	6755.7	2.8185 +23	NU 68	6.8180 + 7	5.9942 - 6	28.96
2200	32038	9.7080	1.2761	6764.0	2.7332	408.9.	6.6153	6.1814	28.96
2400	32236	7.7074	1.2359	6780.0	2.6472	109.43	6-4151	6.3821	28.96
2600 2600	32434 32632	9.7048	1.1970	6797.6	2.5642	410.40	6.2213 6.0339	6.5887	28.96
3000	32830		1.1232	6331.2	2.4064	110.90	5.8526	7.0208	28.96
3200	33027	9.7056 9.7050	1.0862	6848.1	2.3314	411.39	5.4771	7.2464	28.94
3400	33225	9.70hh	1.0543	6954.9	2.2590	411.88	5.5073	7.4788	28.96
3600	33423 33621	9.7038 9.7032	1.0216 9.8992 - 2	6881.7	2.1890 2.1213	412.37 412.86	5.3430 5.1840	7-7180	28.96
1000	33819	9.7024	9.5933 - 2	6915.4	2.0559 +23	413.35	5.0300 + 7	8-2177 - 6.	28.96
1200	34017	9.7020	9.2975	6932.2	1.9926	413.84 414.53	4.8810	8.4786	28.96
14400	34215 34413	9.7014	9.0116 8.7351	6949.0	1.8723	414.33	: 4.7368 4.5971	8.7471 9.0234	26.96
1800	34610	9.7001	8.4677	6982.7	1.8151	415.31	4.4619	9.3076	28.56
5000	34800	9.6995	8.2091	6999.5	1.7598	415.79	4.3310	9.6004	28.98
5200	35006	9.6989	7.9590	7014.3	1.7063	116.28	4.2042	9.9015	28.76
5400 5400	35204 35402	9.6983	7.7170 7.4830	7033.2	1.0545	416.77 417.25	1.0815 3.7626	1.0211 - 5	28.96
5800	35599	9.6971	7.2567	7066.8	1.5560	417.74	3.8674	1.0856	28.96
0000	35797	9.6965	7-0376 - 2	7083.7	1.5091 +23	118.22	3.7358 + 7	1.1195 - 5	28.96
16200	35995 36193	9.6959	6.8257 6.6207	7100.5	1.4638	418.70	3.6277	1.1542	28.96
6600	36390	9.6947	6.4222	7135.2	1.3774	419567	3.4314	1.2265	28.96
6860	3886	9.6941	6.2302	715130	1.3363	420.15	3.3233	1.2643	28.95
7000	36786.	9.6935	6.0443	716768	1.2965	120.63	3.226)	1.3031	28.76
7200	36984	9.6929	368844	7184.7	1.2580	121.11	3. 1357	1.3429	28.74
	37181	9.6922	5.6903 5.5217	7201.5	1.2207	421.59	3.0463 2.9596	1.3840	28.94
7600	37379								

l, m					density	speed	frequency	path	weight
`	Z, m	gravity	weight ω, kg m ⁻² sec ⁻²	height H _p , m	n, m ⁻²	V, m sec⁻¹	, ,	L, m	Meigin
		g,msec		(1) (1)	Ç- ·		± 2 ·	· ·	 -
38000 38200	38229 38431	9.6897	5.0259 - 2	7271.3	1.0785 +23	423.58 424.06	2.7040 + 7 2.6269	1.5665 - 5	28.95 28.96
38400	38633	9.6885	4.8767 4.7322	7305.4	1.0156	424.54	2.5521	1.4635	28.96
38600 38800	38836 39038	9.6879	4.5923 4.4568	7322.5 7339.5	9.8563 +22 9.5662	425.02 425.51	2.4796 2.4093	1.7141	28.96
9000	39241	9.6867	4.3256	7354.6	9.2852	425.99	2.3412	1 1.8195	28.96
39200 39400	39443 39646	9.6861	4.1986 4.0755	7373.7 7390.7	9.0131 8.7495	426.47 426.95	2.2751 2.2111	1.8745	28.96
7400	39648	9.6848	3.9564	7407.8	6.4942	427.43	2.1490	3.9890	28.96
9800	40051	9.6842	3.8410	7424.8	8.2469	427.90	2.0888	2.0486	28.96
0000	40253 40454	9.6836	3.7291 - 2 3.6208	7441.9 7459.0	8.0074 +22 7.7753	428.38 428.86	2.0303 + 7 1.9737	2.1099 - 5 2.1729	28.96
0400	+0458 +0861	9.6824	3.5159	7476.1 7493.1	7.5504	429.34	1-9187	2.2376	28.96
0800	11064	9.6818	3.4142 3.3157	7510.2	7.3325 7.1213	429.81 430.29	1.8654 1.8137	2.3724	28.96
1000	41266	9.3805	3.2202	7527.3	6.9167	430.76	1.7636	2.4426	28.96
1200	41469	9.6799	3.3277 3.0380	7544.4 7561.5	6.7184	431.24 431.71	1.7149	2.5147 2.5887	28.96
13600 I	41874	9.6787	2.9511	7578.6	6.3399	432.19	1.6218	2.6648	28.96
1,600	<u> 12077</u>	9.6781	2.8568	7595.7	6-,1593	432.66	1.5774	2.7429	28.96
2000	42279 42482	9.6775	2.7852 - 2 2.7060	7612.7 7629.8	5.9842 +22 5.8145	433.13 433.61	1.5342 + 7	2.8232 - 5 2.9056	28.9
2400	. 42685	9.6762	2.6293	7646.9	5.6499	434.08	1.4516	2.9902	28.9
2000	42887 43090	9.6756	2.5548 2.4827	7664.0	5.4904 5.3356	434.55 435.02	1.4122	3.0771	28.9
3000	43293	9.6744	2.4127	7698.2	5.1856	435.49	1.3367	3.2580	28.9
3200 3400	43494 43698	9.6738	2.3449 2.2791	7715.3 7732.4	5.0401 4.8990	435.96 436:43	1.3006	3.3521 3.4486	28.9
3400	43901	9.6726	2.2152	7749.6	4.7621:	436.90	1.2315	3.5578	28.9
3800	44104	9.6720	2.1533	7766.7	4.6293	437.37	1.1984	3.6495	28.90
1000 1200	44307 44510	9.6713	2.0933 - 2 2.0350	7783.8 7800.9	4.5005 +22 4.3755	437.83 438.30	1.1663 + 7	3.7540: - 5:- 3.8412	28.9
4400	44712	9.6701	1.9785	78.18.0	4.2543	436.77	1.1049	3.9712	28.9
4600 4800	44915 45118	9.6695	1.9237	7435.1 7052.3	4.1346 4.0225	439.23 439.70	1.0755	4.0852. 4.2000	28.96
5000	45321	9.6683	1.8189	7869.4	3,9117	440.16	1.0191	4.3190	28.96
5200 5400	45524 45727	9.6677	1:7688	7903.6	3.8043 3.6999	440.63	9.9219 + 6	4.4410	28.96
5400	45930	9.4444	1.7202 1.6730	7920.8	3.5987	541.56	9.4055	4-6947	28.96
5000	46132	9.6658	1.6272	7937.9	3.5004	442.02	9.1583	4.8245	28.96
4200	46335 46538	9.4652	1.5828 - 2 1.5376	7955.0 7972.2	3.4050 +22 3.3124	442.48	8.9180 + 6	4.9617 - 5 5.1004	28.96
6400	46741	9.6640	1.977	7989.3	3.2225	443.41	8.4577	-5.2426	28.96
4400 4800	44944 47147	9.6634	1.4571 1.4176	8004.5 8023.6	3.1353 3.0505	443.87	8-2372	5.3006 5.5303	28.94
7000:	47350	9.6621	1.3793	8040.7	2.9683	444.79	7.8146	5.4918	28.94
7200	N7553	9.6615	1.3448	8041.3	2.8943	444.79	7.6198	5.8373	28.96
7400 7400	47756 47959	9.6609	1.3112 1.2784	8041.8	2.8221 2.7517	444.79	7.4298 7.2446	5.9866 6.1396	28.96
7800	48142	9.4597	1.2465	8042.8	2.6831	444.79	7.0640	6,2946	28.96
8000 8200	48365 48568	9.4585	1.2153 - 2. 1.1850	8043.3 8043.8	2.6163 +22 2.5510	444.79 444.79	6.8879 + 6 6.7162	6.4576 - 5	28.96
8400	40771	9.6579	1.1554	8044.3	2.4874	444.79	6.5488	6.7920	28.94
8400	48974 49178	9.6572	1.1265	8045.3	2.4254 2.3450	444.79 444.79	6.3855 6.2263	6.9656 7.1437	28.96
9000	49381	9.4540	1.0709	8045.8	/2.3060	444.79	6.0711	7.3244	28.90
9200	49584/		1.0441	8046.4	2.2485	444.79	5.9197 5.7722	7.5137 7.7058	28.96
9400	49787 49990	9.6548	1.0180 9.9259 - 3	80%5.9	2.1925 2.1378	444.79	5. 4283	7.9028	28.96
9800	30193	9.6536	9.4778	8047.9	2.0845	444.79	5.4860	8-1048	28.96
0000	50396 50904	9.6530	9.4359 - 3 8.8574	8048.4	2.0326 +22	144.79 144.79	5.3512 + 6 5.0239	8.3120 - 5	28.96
1000	51413	9.6499	8.3143	8050.9	⊘1×7.915	444.79	4.7166	9.4303	28.94
1500	51921	9.4484	7-8044	8052.2	1.6819	444.79	4.4281 h. 1578	1-0045 - 4	28.94
2000 2500	52429 52937	9.6453	7.3261 6.9016	8053.5 8025.0	1.5791	443.97	4.1573 3.9098	1.0499	28.94
3000	53444	9.6438	6.5003	7996.5	1.4015	h43.14	3.6762	1-2054	28.94
3500 H	53954 54463	9.6422	6.1209 5.7624	7968.0 7939.5	1.3199	442.32°	3.4557 3.2478	1.2800	28.94
-500	54971	9.6392	5.4237	7911.0	1.1700	440.66	3.0516	1.4440	28.96
5000 5500	55480 55489	9.6377 9.6361	5.1037 - 3 4.8015	7882.5 7853.9	1.1011 +22	139.83 139.00	2.8646 + 6	1-5343 - 4	28.76
4000	56498	9.6346	1.5161	7825.4	9.7965 +21	456.17	2.3278	1.7354	28.94
4500	57007	9.6333	4.2467	7794.0	9.1666	437.33	2.3728	1.9431	28.94
7000 7500	37514 56025	9.6315	3.7525	7768.3	8.6191 8.1025	436.50 435.46	2.2269	1.9401 2.0851	28.56
8000	58534	9.4205	5.5262	7711.1.	7.3/49	434.02	1.9599	2.2186	28.94
8300 96.0	39013 59553	9.627C	3.3127	7482.5	7.1550	433.98	1.8319	2.3612	28.94
9505 C	90095	7.3234	2.7216	7425.3	6.7213 6.3123	132.29	1:5151	2.5136	28.94

TABLE II.—Continued

Altit	ude	Accel: due to	Specific	Pressure scale	Number density	Particle speed	Collision frequency	Mean free path	Molecul weigh
Z, m	H, m	gravity a.msec ⁻²	weight ω, kg·m ⁻² sec ⁻²	height H _e , m		V, m sec⁻¹	ν , \sec^{-1}	L, m	Meigi
38000	37774	9.6904	_5.2004 - 2	7252.1	1.1159 +23	>423,03	2.7941 + 7	1 5150 5	20.04
38200	37972	9.5898	5.0474	7268.9	1.0831	423.51	2.7151	1.5140 - 5 1.5598	28.96
38400	o38169	9.6892	4.8992	7285.8	1.0514	423.99	2.6385	1.6069	28.96
38600 38800	38367	9.6886	4.7557	7302.6	1.0206	424.46	2.5643	1.6553	28.96
39000	38565 38762	9.6880	4.6167 4.4821	7319.5 7336.3	9.9087 +22 9.6204	424.94 425.41	2.4923 2.4225	1.7050 1.7561	28.96
39200	38960	9.6868	4.3517	7353.2	9.3411	425.89	2.3547	1.8086	28.96
39400	39157	9.6862	4.2254	7370.0	9.0705	426.36	2.2891	1.8626	28.96
39800 39800	39355 39552	9.6856 9.6850	4.1030 3.9854	7386.9 7403.7	8.8083 8.5543	426.84 427.31	2.2254 2.1636	1.9180 1.9750	28.96 28.96
+0000 +0200	39750 39947	7.6844 9.6838	3.8696 - 2 3.7582	7420.6 - 7437.4	8.3082 +22 8.0697	427.78 428.26	2.1037 + 7 2.0456	2.0335 - 5 2.0936	28.96 28.96
40400	40145	9.6832	3.6504	7454.3	7.8386	428.73	1.9892	2.1553	28.96
40600	40342	9.6826	3,5458	7471.1	7.6145	429.20	1.9344	2.2187	26.96
40800 41000	40540	9.6819	3.4445	7488.0	7.3974	129.67	1.8813	2.2839	28.96
41200	40737 40935	9.6813 9.6807	3.3463 3.2511	7504.9 7521.7	7.1869 6.9829	430.14 430.61	1.8298	2.3508 2.4194	28.96
41600	41132	9.6801	3.1588	7538.6	6.7851	431-08	1.7313	2.4900	28.96
41600	41329	9.6795	3.0693	7555.4	6.5933	431.55	1.6841	2.5624	28.96
41800	41527	9.6789	2.9825	7572.3	6.4073	432.01	1.6384	2.6368	28.96
42000 42200	41724 41922	9.6783	2.8984 - 2 2.8169	7589.2 7606.0	6.2270 +22 6.0522	432.48 432.95	1.5940 + 7 1.5509	2.7131 - 5 2.7915	28.96
42400	42119	9.6771	2.7378	7622.9	5.8826	433.41	1.5091	2.8720	28.96
42600	42316	9.6765	2.6611	7622.9 7639.8 7656.7	5.7181	433.88	1.4685	2.9546	28.96
42800 43000	42514 42711	9.6759	2.5867	7656-7	5.5586	434.35	1.4291	3.0394	28.96
43200	42711 42908	9.6753	2.5145 2,4445	7673.5 7690.4	5.4039 5.2538	434.81 435.27	1.3908 1.3536	3.1264 3.2157	28.96
43400	43106	9.6741	2.3766	7707.3	5-1082	435.74	1.3175	3.3074	28.9
43600	43303	9.6735	2.3107	7724.1	4.9669	436.20	1.2824	3.4014	28.96
43800	43500	9.6729	2.2468	7.741.0	4.8298	436.66	1.2483	3.4980	28.96
44000 44200	43697 43895	9.6723	2.1848 - 2 2.1247	7757.9 7774.8	4.6968 +22 4.5678	437.13 437.59	1.2152 + 7 1.1831	3.5970 - 5 3.6987	28.96
44400	44692	9.6711	2.0663	7791.7	4.4425	438.05	1.1519	3.8029	28.96
44600	44289	9.6705	2.0096	7808.5	4.32/10	438.51	1.1215	3.9099	28.96
N 800	44486	9,6698	1.9546	7825.4	N.2030	438.97	1.0921	4.0197	28.96
45000 45200	44684 <i>/</i> 44883	9.6692	1.9012 1.8494	7842.3 7859.2	4.0885 3.9773	439.43	1.0634	4.1322	28.96
15400	45078	9.6680	1.7992	7876.1	3.8694	439.89 440.35	1.0356	4.2477 4.3662	28.96 28.96
45600 45800	45275 45472	9.6674 9.6668	1.7503	7892.9 7909.8	3.7647 3.6630	440.80 441.26	9.8225 + 6 9.5671	4.4877 4.6123	28.96
46000	45669	9.6662	1.6569 - 2	7926.7	: : 3.5642 +22	441.72	9.3188 + 6	4.7401 - 5	28.96
46200	45867	9.6656	1.6123	7943.6	.3.4683	442.17	9.0775	4.8711	28.96
16400	46064	9.6650	1.5689	7960-5	3.3752	442.63	8.8429	5.0055	28.96
00884	46261 46458	9.6644	1.5268 1.4858	7977.4 7994.3	3.2848 3.1970	443.09	8.6149	5.1433 5.2845	28.96
7900	46655	9.6632	1.4461	8011.2	3.1117	444.00	8.1777	5.4294	28.96
17200	46852	9.6626	1.4075	8028./1	3.0289	444.45	8.1777 7.9681	5.5779	28.96
17400	47049	9.6620	1-3707	8040/9	2.9499	444.79	7.7663	5.7272	28.96
17600 17800	47246 47443	9.661k	1.3370	8041/-4 8047-9	2.8774 2.8068	444.79 444.79	7.5755 7.3894	5.8714 6.0193	28.96
8000	47640	9.6602	1.2720 - 2	8042.4	2.7378 +22	444.79	7.2079 + 6	6-1709 - 5	28.96
18200 18400	47837 48034	9.6596 9.6590	1.2406 1.2101	8042.9 8043.4	2.6706 2.6050	444.79 444.79	7.0309 6.8582	6.3262	28.96
8600	48231	9.6584	1.1803	8043.9	2.5410	444.79	6.6898	6.6488	
18800	48428	9.6578	1.1512	8044.4	2.4786	444.79	6.5255	6.8162	28.96
9000	48625	9.6572	1.1229	8044.9	2.4178	444.79	6.3653	6.9878	28.96
19200	48822 49019	9.6566	1.0953 1.0683	8045.4	2.3584 2.3005	444.79 444.79	4.2090 6.0565	7.1636 7.3440	28.96
9600	49216	9.6560 9.6554	1.0420	8046.4	2.2440	444.79	5.9079	7.5288	28.96
9800	49413	9.6548	1.0164	8046.9	2.1889	444.79	5.7628	7.7183	28.96
50000 50500	49610 50102	9.6542	9.9136 - 3	8047-4 8048-7	2.1352 +22 2.0066	444.79	5.6214 + 6	7-9125 - 5	28.96
51000	50594	9.6511	9.3150 8.7526	8049.9	1.8857	444.79 444.79	5.2828 4.9646	8.4197 8.9593:	28.96
51500	51086	9.6496	8.2243	8051.2	1.7722	444.79	4.6656	9.5333	28.94
52000	51578	9.6481	7.7279	8052.4	1.6655	444.79	4.3847	1.0144 - 4	28.96
52500	52070	9.6466	7.2653 6.8508	8049.5	1.5660	444.68	4.1218 3.8802	1.0788	28.94
53000 53500	52562 53053	9.6451 9.6436	6.8508 6.4587	8021.5 7993.5	1.4769 1.3926	443.87 443.06	3.8802 3.6520	1.1439	28.96
54000	53545	9.6421	6.0878	7965.5	1.3128	442.24	3.4365	1.2869	28.96
54500	54037	9.6406	5.7369	7937.4	1.2373	441.43	3.2330	1,3654	28.96
55000 55500	54528 55020	9.6391 9.6376	5.4052 - 3 5.0915	7909.4 7881.4	1.1660 +22 1.0985	440.62 439.80	3.0409 5 6 2.8596	1.4490 - 4 1.5380	28.94
56000	55511	9.6361	4.7951	7853.3	1.0347	438.98	2.6885	1.6328	28.96
56500	54002	9.6346	4.5149	. 7825.3	9.7439 +21	438.16	2.5271	1.7339	28.96
57000	56493	9.6331	4.2502	7797.2	9.1761	437.34	2.37+8	1.8416	28.96
	56984	9.6316	4.0001 3.7640	7769.1 7741.1	8.6357 8.1271	436.52	2.2313	1.9564	28.96
57500					8.1271	435.70	2.0959	2.0788	28.96
58000	57476 57966			7713-0	7.6468	L3L A7	1.9483	2,2094	20.04
	57966 58457	9.6286	3.5410 3.3304	7713.0	7.6468 7.1932	434.87 434.05	1.9683 1.8480	2.2094 2.3487 2.4973	28.96

		····		0201012	14.10÷. C	LINOUE, N		MI.I 3		
	Altit		Accel. due to	Specific weight	Pressure scale height	Number density	Particle speed	Collision frequency	Mean free	Molecular weight
	H, m	Z, m	gravity g,msec ⁻²	weight ω, kg m ⁻² sec ⁻²	H _p , m	n, m ⁻³	V, m sec ⁻¹	ν , sec ⁻¹	L, m	M
	60000 60500 61000 61500 62000 62500 63500 64500 64500	60572 61081 61591 62101 62611 63121 63631 64141 64651	9.6224 9.6208 9.6193 9.6178 9.6163 9.6147 9.6132 9.6117 9.6101	2.7427 - 3 2.5741 2.4753 2.2744 2.1408 2.0140 1.8937 1.7798 1.6718 1.5696	7596.7 7568.0 7539.4 7480.9 7422.4 7363.9 7305.3 7246.7 7188.2 7129.6	5.9267 +21 5.5633 5.2209 4.9172 4.6289 4.3554 4.0961 3.8502 3.6173 3.3966	431.44 430.59 429.74 428.04 426.33 424.61 422.89 421.15 419.41	1.5135 + 6 1.4179 1.3280 1.2458 1.1681 1.0946 1.0253 9.5979 + 5 8.9800 8.3971	2.8506 - 4 3.0368 3.2360 3.4358 3.6498 3.8790 4.1246 4.3880 4.6706 4.9739	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	65000 65500 66000	65672 66182	9.6071 9.6056 9.6040	1.4729 - 3 1.3813 1.2948	7070.9 - 7012.3 6953.6	3.1876 +21 2.9902 2.8032	415.91 414.15 412.38	7.8477 + 5 7.3300 6.8425	5.2998 - 4 5.6501 6.0268	28.964 28.964 28.964
	66500 67000 67500 68000 68500 69500	66693 67203 67714 68225 68735 69246 69757 70268	9.6025 9.6010 9.5995 9.5979 9.5764 9.5949 9.5933	1.2748 1.2130 1.1357 1.0627 9.9386 - 4 9.2890 8.6766 8.0996	6894.9 6836.2 6777.5 6718.8 6660.0 6601.3 6542.5	2.8032 2.6265 2.4596 2.3019 2.1531 2.0127 1.8803 1.7555	412.38 410.61 408.82 407.03 405.23 403.42 401.61 399.78	6.8425 6.3836 5.9518 5.5459 5.1644 . 4.8061 4.4697 4.1542	6.0268 6.4323 6.8689 7.3393 7.8465 8.3940 8.9851 9.6237	28.964 28.964 28.964 28.964 28.964 28.964 28.964
_	70000 70500 71000 71500 72000 72500 73500 74000 74500	70780 71291 71802 72314 72825 73337 73848 74360 74872 73384	9.5918 9.5903 9.5888 9.5872 9.5857 9.5842 9.5827 9.5811 9.5796 9.5781	7.556! - 4 7.0446 6.5634 6.1110 5.6859 5.2868 4.9122 4.5608 4.2315 3.9230	6483.6 6424.8 6366.0 6307.1 6248.2 6189.3 6130.4 6071.4 6012.5 5953.5	1.6380 +21 1.5274 1.4233 1.3254 1.2334 1.1470 1.0659 9.8978 +20 9.1846 8.5163	397.95 396.11 394.26 392.40 390.54 388.66 386.77 384.88 382.98 381.06	3.8583 ÷ 5 3.5810 3.3214 3.0784 2.8511 2.6386 2.4401 2.2548 2.0820 1.9209	1.0314 - 3 1.1061 1.1870 1.2747 1.3698 1.4730 1.5851 1.7069 1.8395	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	75000 75500 76000 76500 77000 77500 78500 78500 79000 79500	75896 76408 76920 77432 77944 78457 78969 79482 79994 80507	9.577 9.575 9.574 9.572 9.570 9.569 9.567 9.566 9.564 9.564	3.634 - 4 3.364 3.111 2.876 2.655 2.450 2.258 2.080 1.914 1.741	5894. 5835. 5776. 5777. 5658. 5599. 5540. 5421. 5422.	7.891 +20 7.305 6.758 6.246 5.769 5.323 4.908 4.521 4.161 3.786	379.1 377.2 375.3 373.3 371.3 369.4 367.4 365.4 363.4	1.771 + 5 1.631 1.501 1.380 1.268 1.164 1.067 9.778 + 4 8.950 8.142	2.141 - 3 2.313 2.500 2.705 2.929 3.174 3.442 3.737 4.060 4.463	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	80000 80500 81000 81500 82000 82500 83500 84000 84500	81020 81533 82046 82559 83072 83585 84098 84612 85125 85639	9.561 9.558 9.557 9.555 9.555 9.552 9.551 9.551 9.549	1.58h - h 1.hh1 1.310 1.192 1.08h 9.862 - 5 8.971 8.161 7.423 6.752	5424. 5424. 5425. 5426. 5427. 5428. 5429. 5430. 5431.	3.444 +20 3.133 2.851 2.593 2.359 2.147 1.953 1.777 1.616 1.471	363.4 363.4 363.4 363.4 363.4 363.4 363.4 363.4	7.408 + 4 6.739 6.131 5.578 5.075 4.617 4.200 3.821 3.477 3.163	4.906 - 3 5.392 5.392 6.515 7.161 7.871 8.651 9.509 1.085 - 2	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
	85000 85500 86000 87000 87000 87500 88500 89500	86152 86666 87180 87693 88207 88721 89236 89750 90264 90778	9.546 9.545 9.543 9.542 9.540 9.537 9.537 9.535 9.534	6.142 - 5 5.587 5.082 4.623 4.205 3.825 3.479 3.165 2.867 2.588	5432. 5434. 5435. 5435. 5436. 5437. 5437. 5438. 5463.	1.338 +20 1.217 1.107 1.007 9.165 +19 8.338 7.586 6.902 6.252 5.645	363.4 363.4 363.4 363.4 363.4 363.4 363.4 363.7	2.878 + 4 2.618 2.382 2.167 1.971 1.793 1.632 1.484 1.348 1.222	1.263 - 2 1.388 1.526 1.677 1.883 2.026 2.227 2.488 2.702 2.993	28, 964 28, 964 28, 964 28, 964 28, 964 28, 964 28, 964 28, 964 28, 963
	90000	91203	9.531	2.338 - 5	5558.	5.101 +19 :	367.3	1.109 + 4	3.312 - 2	28.96
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	L		<u> </u>	i	L		<u> 1</u>		L	1

TABLE II,-Continued

ude	Accel. due to gravity	weight	Pressure scale height	Number density	Particle speed	Collision frequency	path	Moleculo weight M
				· · · · · · · · · · · · · · · · · · ·		:		28.964
59930 60420	9.6226	2.7673 2.6004	7600.7 7572.6	5.9797 5.6199	431.56 430.73	1.5275	2.8254 3.0062	28.964 28.964
61401	9.6181	2.3017	7492.5	4.9760	428.38	1.2617	3.3952	28.964
62382	9.6151	2.0434	7377.7	4.4189	425.02	1.1117	3.8233	28.964 28.964 28.964
63362 63852	9.6121 9.6106	1.8106	7262.9 7205.5	3.9158 3.6849	421.63 419.93	9-7749 + 5 9-1591	4.3134 4.5848	28.964 28.964
64342 64832	9.6091 9.6076	1.6013 - 3 1.5048	7.148.1 7090.6	3.4651, +21. 3.2567	418,22 410.51	8.5776 + 5 8.0288	4.8757 - 4 5.1876	28.964
65811	9.6046	1.3269	6975.7	2.8725	413.05	7.0229	5.8815	28.964
66791	9.6016	1.1675	6860.8	2.5283	409657	6.1294	6.6821	28.964 28.964 28.964
67770	9.5986	1.0251	6745.9	2.2206	406.06	5.3372	7.5081	28.964
:68748:	9.5956	8.9804	6630.8	1.9460	+02°55	. 4.636 4	8.68.18;	28.964
69727	9.5927	7.8492	6515.8	1.7014	398.95	4.0177	9.9299	28.964
70705 71193	9.5897 9.5882	6.8441	6400.7 6343.2	1.4840 1.3847	395.35 393.54	3.4727 3.2254	1.1385	28.964
71682 72171	9.5867	5.9529 5.5465	6285.6 6228.1	1.2912	391.72 389.89	2.9937 2.7767	1.3085	28.96
72660 73148 73637	9.5837 9.5822 9.5807	5.1645 4.8055 4.4685	6112.9 6055.3	1.1205 1.0428 9.6980 +20	388.06 386.21 384.36	2.5737 2.3838 2.2063	1.5078	28.964 28.964 28.964
74125 74614	9.579 9.578	4.152 - 4 3.856	5998. 5940.	9.013 +20 8.370	382.5 380.6	2.041 + 5 1.886	1.874 - 3 2.018	28.961 28.961
75590	9.575	3.317	5825.	7.204	376.9	1.607	2.345	28.961 28.961 28.961
76566~	9.572	2-845.	i. 5710.	6.181	373.0	1.365	2.7.33	28.96
77542 78030	9.569	2.433	5594-	5.287 4.884	369.2	1.155	3.195 3.459	28.96
78518 79006	ĺ	2.074	ļ	4.506 4.157 +20	363.4	8.940 + 4	3.748	28.96
79493 79981	9.563	1.743	5423. 5423.	3.790 3.457	363.4	8.153 7.435	4.457	28.96
80956	-9-558	1,321	5424. 5425.	2.875	+ 363.4	6.183	5.877	28.96
8 1930	9.555	1.099	5427.	2.391	363.4	5.142	7.067	28.961 28.961 28.961
82904 83391	9.552 9.551	9.135 - 5 8.330	5429. 5429.	1.989	363.4	4.277 3.901	8.496 9.316	28.96
83878 84365	9.550	7.596 - 5	5430. 5431.	1.654 +20	363.4 363.4	3.558 + 4 3.245	1.021 - 2	28.964
84852 85339	9.547	6.317 5.761	5432. 5433.	1.376 1.255	363.4	2.959	1.228	28.96
86312	9.542	42791	5434.	1.044	363.4	2.245	1.618	28.96
87285	9.539	3.984	5436.	8.685	363.4	1.868	1.945	28.76
88257	9.536	3.314	5438.	7.226	363.4	1.55%	2.338	28.96
88743	9.535	3.022 - 5	5439.	8.591 +19	363.4	1.418 + 4	2.563 - 2	28.96
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i.	1	I	1 1,3 3	;	1	I'	1	I .
	H, M 59439 59930 60420 60420 60911 61891 62382 63852 63852 64382 65852 64382 65852 64882 65878 67280 67780 68259 68787 70216 70705 71198 73637 74125 75590 76078 77584 77584 77584 77684 77584 77684 77684 77684 83391 83888	due to gravity g,msec^2	due to gravity Gravi	due to gravity weight wight wight height height w, kg m² sec² Hp, m	due	due to Specific Weight Gensity Gensi	due to gravity weight gravity weight height height height height m, m³ √, m sec weight frequency √, sec m, m³ √, m sec weight √,	due to Specific Scole General Genera

Altit	tude	Accel. due to	Specific weight	Pressure scale	Number density	Particle	Collision		Molecular
Z, m	H, m	gravity a.msec ⁻²	ω, kg m ⁻² sec ⁻²	height H _P , m	n, m ⁻³	speed ∇, m sec ⁻¹	frequency ν , sec ⁻¹	path L, m	weight M
90000 90500 91500 91500 92500 92500 93000 93500 94500	88743 89229 897.15 90201 90687 91173 91659 92144 92630 93116	9.535 9.533 9.532 9.530 9.529 9.527 9.526 9.524 9.523 9.521	3.022 - 5 2.735 2.477 2.245 2.245 1.849 1.679 1.527 1.389 1.265	5439. 5485. 5531. 5577. 5623. 5669. 5715. 5761. 5853.	6.591 +119 5.965 5.803 8.898 8.488 4.035 3.667 3.335 3.035 2.764	363.4 364.9 366.4 367.9 369.4 370.9 372.3 373.8 375.3	1.418 + 4 1.288 1.172 1.067 9.716 + 3 8.858 8.081 7.378 6.742 6.164	2.563 - 2 2.832 3.127 3.449 3.802 4.187 4.607 5.066 5.566 6.111	28.96 28.96 28.96 28.96 28.96 28.96 28.95 28.95
95000 95500 96000 96500 97000 97500 98500 98500 99500	93601 94086 94572 95057 95542 96027 96512 96997 97482	9.520 9.518 9.517 9.515 9.514 9.513 9.511 9.510 9.500	1.153 - 5 1.051 7.574 - 6 8.761 8.006 7.321 6.699 6.134 5,620	5899. 5946. 5992. 6038. 6084. 6130. 6177. 6223. 6269.	2.520 +19 2.298 2.098 1.917 1.752 1.603 1.467 1.344	378.2 379.6 381.1 382.5 383.9 385.4 386.8 388.2	5.640 + 3 5.165 4.732 4.359 3.982 3.656 3.359 3.088 2.841	6.705 - 2 7.350 8.052 8.815 9.643 1.054 - 1 1.151 1.257	28.94 28.94 28.93 28.93 28.92 28.92 28.91 28.90 28.90
100000 101000 102000 102000 104000 105000 106000 107000 108000	98451 99420 100389 101357 102326 103294 104261 105228 106195 107162	9-507 9-505 9-502 9-599 9-496 9-493 9-498 9-485 9-482 9-479	5.153 4.728 - 6 3.952 3.318 2.796 2.366 2.009 1.712 1.463 1.255 1.080	6362. 6513. 6668. 6821. 6974. 7128. 7281. 7435. 7588.	1.130 1.037 +19 8.681 +18 7.295 6.156 5.215 4.434 3.784 3.240 2.783 2.398	391.0 392.4 397.0 401.6 406.1 410.6 415.0 419.4 423.7 423.0 432.3	2.615 2.409 + 3 2.040 1.734 1.480 1.267 1.089 9.393 + 2 8.126 7.051 6.136	1.495 1.629 - 1 1.946 2.316 2.744 3.240 3.810 4.465 5.215 6.071 7.045	28.89 28.88 28.86 28.83 28.75 28.75 28.75 28.64 28.60
110000 111000 112000 113000 114000 115000 117000 117000	108129 109095 110060 111026 111026 111091 112952 113921 114885 115849 116813	7.476 9.473 9.467 9.461 9.461 9.455 9.455 9.452	9.314 - 7 7.919 6.773 5.825 5.036 h.374 3.816 3.344 2.941 2.597	7896. 8201. 8507. 8813. 9119. 9425. 9732. 10038. 10385.	2-073 +18 1-766 1-513 1-304 1-129 9-830 +17 8-594 7-546 6-652 5-886	436.5 444.8 452.9 460.9 468.8 476.5 484.1 491.6 499.0 506.3	5.356 + 2 4.649 4.057 3.557 3.134 2.773 2.463 2.196 1.965 1.764	8.150 - 1 9.568 1.117 + 0 1.296 1.496 1.719 1.966 2.239 2.5540 2.870	28.56 28.51 28.47 28.42 28.37 28.37 28.27 28.27 28.17 28.17
12000 12100 12200 12300 12300 12400 12400 12700 12800 12700	717776 118739 119702 120665 121627 122587 123551 124512 125473 126434	9.447 9.441 9.435 9.435 9.432 9.426 9.426 9.423	2.301 - 7 1.99% 1.7%1 1.530 1.353 1.203 1.075 9.6%7 - 8	10959. 11570. 12182. 12794. 13407. 14633. 15246. 15860.	5.226 +17 4.539 3.972 3.998 3.100 2.761 2.472 2.224 2.009	513.4 527.5 541.2 554.5 567.5 580.3 592.7 604.9 616.9 628.7	1.588 + 2 1.417 1.272 1.148 1.041 9.484 + 1 8.074 - 7.963 7.963 7.334 6.777	3.233 + 0 3.722 4.254 4.830 5.451 6.833 7.597 8.411	28.07 28.02 27.97 27.91 27.86 27.86 27.76 27.72 27.67 27.52
130000 131000 132000 133000 134000 135000 135000 137000 138000	12739h 12835h 12931h 13027h 131232 132192 133151 134109 135067 136025	9.417 9.415 9.412 9.409 9.403 9.403 9.400 9.397 9.394 9.391	7.147 - 8 4.514 5.955 5.460 5.020 4.628 4.276 3.961 3.676 3.419	17089. 17704. 10320. 18936. 19952. 20168. 20785. 21403. 22020. 22638.	1.657 +17 1.513 1.366 1.273 1.083 1.002 9.299 +16 8.645 8.053	640.2 651.5 662.6 673.6 684.3 694.9 705.4 715.7 725.8 735.8	6.280 + 1 5.836 5.836 5.076 4.750 4.854 4.185 3.939 3.714 3.507	1.019 + 1 1.116 1.219 1.327 1.441 1.560 1.666 1.817 1.954 2.098	27.58 27.53 27.49 27.45 27.41 27.37 27.33 27.30 27.26
140000 141000 142000 144000 145000 145000 147000 147000 147000	136985 138897 138897 139853 140810 141766 142721 143677 144632 145587	9.388 9.385 9.385 9.380 9.377 9.371 9.368 9.365 9.362	3.186 - 8 2.975 2.782 2.606 2.455 2.298 2.162 2.038 1.923 1.816	23257. 23876. 24495. 25115. 25735. 26355. 26976. 27597. 20218. 28840.	7.516 +16 7.027 6.581 6.174 5.801 5.458 5.143 4.852 4.852 4.336	745.7 755.4 765.0 774.5 783.9 793.2 802.3 811.4 820.3	3.317 + 1 3.142 2.980 2.830 2.691 2.562 2.442 2.330 2.226 2.128	2.248 + 1 2.404 2.567 2.737 2.713 3.095 3.285 3.085 3.685 3.685	27.20 27.17 27.13 27.11 27.08 27.05 27.02 27.00 26.97 26.94
150000 151000 152000 153000 154000 155000 157000 158000 159000	14541 147446 148450 149403 150357 151310 152263 153215 154167	9.360 9.357 9.351 9.351 9.345 9.345 9.339 9.337	1.718 - 8 1.635 1.557 1.485 1.416 1.251 1.291 1.234 1.180	29462. 29932. 30401. 30871. 3181. 31812. 32282. 32753. 33224. 33696.	4.107 +16 3.913 3.732 3.562 3.502 3.251 3.109 2.975 2.849 2.730	838.0 851.0 857.4 863.8 876.4 882.6 888.8 894.9	2.037 + 1 1.956 1.880 1.807 1.739 1.674 1.613 1.554 7.499 1.445	h.11h + 1 h.317 h.527 h.7h3 h.967 5.197 5.478 5.678 5.930 6.188	26.92 26.89 26.81 26.81 26.82 26.79 26.77 26.71 26.71

TABLE II.-Continued

GEOME I RIC					INIC AL	INTODE, WE	11110			
	Altit		Accel. due to	Specific weight	Pressure scale height	Number density	Particle speed	frequency	Mean free path	Molecular weight
ŀ.	Z, m	H, m	g,msec ⁻²	weight ω, kg m²sec²²	H _p , m	n, m ⁻³	⊽, m sec⁻¹	ν , sec ⁻¹	L, m	М
	160000 161000 162000 163000 164000 165000 166000 167000	156071 157022 157973 158924 159874 160825 161775 162724 163673 164622	9.331 9.328 9.325 9.322 9.319 9.317 9.314 9.311 9.308 9.305	1.081 - 8 1.040 1.002 9.646 - 9 9.252 8.954 8.631 8.322 8.027 7.745	34168. 34886. 34804. 35123. 35442. 35761. 36080. 36399. 36719.	2.618 +16 2.523 2.432 2.345 2.262 2.182 2.107 2.034 1.964 1.907	901.0 905.1 909.1 913.1 917.1 921.1 925.0 929.0 932.9 936.8	1.396 + 1 1.351 1.308 1.267 1.228 1.190 1.153 1.118 1.085	6.454 + 1: 6.697 6.948 7.205 7.470 7.741 8.020 8.307 8.601 8.904	26.66 26.63 26.60 26.58 26.55 26.52 26.49 26.47 26.44 26.42
	170000 171000 172000 173000 174000 175000 176000 177000 178000	165571 166520 167468 168416 169363 170310 171257 172204 173150 174097	9-302 9-299 9-297 9-294 9-281 9-285 9-282 9-280 9-277	7.475 - 9 7.234 7.002 6.779 6.565 6.358 6.159 5.767 5.782	37358. 37586. 37814. 38041. 38269. 38497. 38726. 38954. 39182. 39411.	1.830 +16 1.773 1.719 1.667 1.616 1.558 1.521 1.476 1.432 1.390	940.7 943.4 956.1 948.8 951.5 954.2 956.9 959.6 962.2 964.9	1.019 + 1 9.903 + 0 9.627 9.361 9.103 8.854 8.614 8.381 8.156 7.938	9.233 + 1 9.527 9.828 1.014 + 2 1.045 1.078 1.111 1.145 1.180 1.216	26.45 26.42 26.39 26.36 26.33 26.30 26.27 26.24 26.21 26.18
	180000 181000 182000 183000 184000 185000 186000 187000 188000	175042 175988 176933 177878 178823 379767 180711 181655 182598 183542	9.274 9.271 9.268 9.265 9.263 9.250 9.257 9.254 9.251 9.248	5.433 - 9 5.268 5.108 4.954 4.806 4.663 4.525 4.392 4.263 4.139	39640. 39869. 40098. 40327. 40556. 40786. 41015. 41245. 41475. 41704.	1.349 +16 1.310 1.272 1.236 1.201 1.166 1.134 1.102 1.071	967.5 970.2 972.8 975.4 976.1 980.7 983.3 985.9 988.5	7.727 + 0 7.524 7.326 7.135 6.950 6.771 6.597 6.429 6.266 6.109	1.252 + 2 1.290 1.328 1.367 1.407 1.448 1.490 1.533 1.577 1.622	26.15 26.12 26.09 26.06 26.03 26.00 25.97 25.94 25.91 25.88
	190000 191000 192000 193000 194000 195000 196000 198000 199000	184485 185427 186370 187312 188253 189195 190136 191077 192018 192958	9.246 9.243 9.240 9.237 9.234 9.231 9.229 9.226 9.223 9.220	4.019 - 9 3.909 3.802 3.698 3.598 3.598 3.590 3.407 3.316 3.227 3.141	41935. 42103. 42271. 42439. 42608. 42776. 42945. 43113. 43282. 43451.	1.013 +16 9.863 +15 9.607 9.359 9.119 8.886 8.659 8.439 8.226 8.019	993.6 995.5 997.3 999.1 1001.0 1002.8 1004.6 1006.4 1008.2 1010.0	5.955 + 0 5.811 5.671 5.535 5.403 5.274 5.149 5.027 4.909 4.794	1.668 + 2 1.713 1.759 1.805 1.853 1.901 1.951 2.002 2.054 2.107	25.85 25.82 25.79 25.76 25.73 25.70 25.68 25.65 25.62 25.59
	200000 201000 202000 203000 204000 205000 206000 207000 208000	193898 194838 195777 196716 197655 198594 199532 200470 201408 202346	9.217 9.215 9.212 9.209 9.206 9.203 9.200 9.198 9.195 9.192	3.058 - 9 2.977 2.899 2.823 2.749 2.678 2.608 2.541 2.476 2.412	43620. 43789. 43958. 44127. 44297. 44636. 44636. 44975. 45145.	7.818 +15 7.622 7.433 7.248 7.069 6.896 6.727 6.562 6.403 6.248	1011-8 1013-7 1015-5 1017-3 1019-0 1020-8 1022-6 1024-4 1026-2 1028-0	4.682 + 0 4.573 4.457 4.364 4.264 4.167 4.072 3.979 3.889 3.802	2.161 + 2 2.216 2.273 2.331 2.390 2.450 2.512 2.574 2.639 2.704	25.56 25.53 25.50 25.47 25.44 25.41 25.38 25.35 25.33
	210000 211000 211000 213000 213000 214000 215000 216000 217000 219000	203283 204220 205156 206093 207029 207964 208900 209835 210770 211705	9.189 9.186 9.184 9.181 9.178 9.175 9.173 9.170 9.167 9.164	2.351 - 9 2.291 2.233 2.176 2.122 2.068 2.017 1.918 1.870	45315. 45485. 45655. 45826. 45996. 46166. 46337. 46678. 46849.	6.097 ÷15 5.951 5.808 5.670 5.535 5.404 5.277 5.153 5.033 4.915	1029.8 1031.5 1033.3 1035.1 1036.8 1038.6 1040.3 1042.1 1043.9 1045.6	3.716 + 0 3.633 3.552 3.474 3.397 3.322 3.249 3.179 3.109 3.042	2.771 + 2 2.839 2.909 2.980 3.052: 3.126 3.202 3.357 3.457	25.27 25.24 25.21 25.18 25.15 25.12 25.09 25.06 25.04 25.01
	220000 221000 222000 223000 224000 225000 226000 227000 228000	212639 213573 214507 215440 216374 217306 216239 219171 220104 221035	9-161 9-159 9-156 9-153 9-150 9-147 9-145 9-142 9-139	1.524 - 9 1.779 1.736 1.694 1.652 1.612 1.573 1.536 1.499	47020. 47191. 47362. 47533. 47705. 47876. 48048. 48219. 48391. 46563.	4.801 +15 4.690 4.582 4.477 4.375 4.275 4.178 4.083 3.991 3.902	1047.3 1049.1 1050.8 1052.6 1054.3 1056.0 1057.8 1059.5 1061.2 1062.9	2.976 + 0 2.912 2.850 2.789 2.730 2.672 2.616 2.561 2.561 2.567 2.455	3.519 + 2 3.6027 3.687 3.774 3.862 3.952 4.044 4.137 4.233 4.330	24.98 24.95 24.92 24.89 24.86 24.83 24.80 24.77 24.75 24.72
	230000 231000 232000 233000 234000 234000 236000 237000 239000	221967 222898 223829 224760 225690 226620 227550 228479 229409 230338	9.134 9.131 9.128 9.125 9.122 9.120 9.117 9.114 9.114	1.428 - 9 1.395 1.363 1.332 1.301 1.272 1.243 1.214 1.187	48735. 48875. 49016. 49156. 49297. 49438. 49579. 496.00.	3.815 +15 3.732 3.651 3.573 3.496 3.421 3.348 3.277 3.208 3.140	1064.7 1066.0 1067.4 1068.8 1070.1 1071.5 1072.9 1074.2 1075.6 1076.9	2.40% + 0 2.355 2.307 2.260 2.215 2.170 2.126 2.08% 2.08% 2.002	4.429 + 2 4.527 4.627 4.729 4.832 4.938 5.046 5.155 5.267 5.381	24.69 24.63 24.60 24.57 24.54 24.51 24.49 24.46 24.43

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10	s a Altit		Accel. due to gravity		Pressure scale height	Number density	Particle speed	Collision frequency	Mean free path	Molecular weight
	Z, m	H, m	g,msec ⁻²	ω, kg m ⁻² sec ⁻²	H _P , m	n, m ⁻³	⊽, m sec ¹	ν, sec ⁻¹	L, m	М
	240000 241000 242000 243000 243000 244000 246000 247000 248000 249000	231266 232195 233123 234051 234978 235905 236832 237759 238686 239612	9.106 9.103 9.100 9.098 9.095 9.092 9.089 9.087 9.084 9.081	1.134 - 9 1.108 1.084 1.059 1.036 1.013 9.902 -10 9.683 9.470 9.262	50144. 50285. 50426. 50568. 50709. 50851. 50993. 51135. 51277.	3.074 +15 3.007 2.946 2.685 2.824 2.766 2.709 2.653 2.598 2.545	1078.3 1079.7 1081.0 1082.4 1083.7 1085.1 1086.4 1087.7 1089.1	1-962 + 0 1-923 1-885 1-888 1-888 1-776 1-776 1-776 1-708 1-675 1-642	5.496 + 2 5.614 5.735 5.857 5.982 6.108 6.238 6.369 6.503 6.639	24.40 24.37 24.33 24.31 24.28 // 24.25 24.20 24.17 24.17
à	250000 251000 252000 253000 254000 255000 256000 257000 258000 259000	240538 241463 242389 243314 244238 245163 245163 246087 247011 247934 248858	9.078 9.074 9.073 9.070 9.067 7.065 9.062 9.059 9.056 9.054	9.058 -10 8.8607 8.478 8.294 8.294 7.940 7.769 7.602 7.439	51561. 51703. 51845. 51987. 52130. 52272. 52415. 52557. 52700. 52843.	2.493 +15 2.442 2.392 2.344 2.296 2.250 2.205 2.160 2.117 2.075	1091.8 	1.611 + 0 1.500 1.550 1.520 1.491 1.463 1.435 1.435 1.482 1.356	6.778 + 2 6.919 7.063 7.209 7.358 7.509 7.663 7.820 7.980 6.142	24.11 24.08 24.05 24.02 23.99 23.96 23.93 23.91 23.88 23.85
	260000 261000 262000 263000 264000 265000 266000 267000 268000 269000	249781 250704 251626 252548 253470 254392 255313 256235 257155 258076	9.051 9.048 9.045 9.043 9.037 9.037 9.034 9.032 9.029	7.280 -10 7.125 6.973 6.826 6.681 6.540 6.403 6.268 6.137 6.009	52986. 53128. 53271. 53415. 53558. 53701. 53844. 53988. 54275.	2.03% +15 1.993 1.95% 1.916 1.878 1.885 1.770 1.770 1.776	1105.1 1106.4 1107.7 1109.0 1110.4 1111.7 1113.0 1114.3 1115.6	1.330 + 0 1.305 1.281 1.257 1.234 1.211 1.189 1.167 1.146	8.307 + 2 8.475 8.646 8.820 8.996 9.176 9.359 9.585 9.734	23.82 23.79 23.76 23.73 23.70 23.67 23.62 23.62 23.59 23.56
ñ	270000 271000 272000 273000 275000 275000 275000 276000 277000 278000	258996 259916 260836 261755 262675 263594 264512 265430 266349 267266	9.024 9.021 9.018 9.015 9.013 9.010 9.007 9.004 9.002 8.999	5.884 -10 5.762 5.642 5.526 5.412 5.301 5.192 5.086 4.982 4.880	54418. 54562. 54766. 54850. 54994. 55138. 55282. 55570. 55715.	1.669 +15 1.637 1.605 1.575 1.545 1.515 1.486 1.458 1.431 1.404	1118.2 1119.5 1120.8 1122.1 1123.4 1124.7 1126.0 1127.3	1.105 + 0 1.085 1.065 1.046 1.027 1.009 9.907 - 1 9.731 9.558 9.389	1.012 + 3 1.032 1.052 1.073 1.074 1.115 1.137 1.159 1.181	23.53 23.50 23.47 23.41 23.36 23.35 23.33 23.30 23.27
	280000 281000 282000 283000 284000 285000 286000 287000 288000 289000	268184 269101 270018 270935 271851 272767 273683 274599 275514 276429	8.996 8.994 8.991 8.988 8.986 8.980 8.980 8.977 8.975 8.972	4.78110 4.684 4.590 4.497 4.407 4.407 4.232 4.18 4.232 4.18 8.065 3.984	55859. 56004. 56148. 56293. 56438. 56727. 56872. 57018. 57163.	1,377 +15 1,352 1,352 1,302 1,277 1,254 1,254 1,208 1,186 1,164	1131.2 1132.5 1133.8 1135.1 1136.4 1137.7 1139.0 1140.2 1141.5 1142.8	9.223 - 1 9.060 8.745 8.593 8.443 8.296 8.153 8.012 7.874	1.227 + 3 1.250 1.274 1.298 1.323 1.347 1.373 1.399 1.425 1.451	23.24 23.21 23.18 23.15 23.12 23.09 23.06 23.03 23.01
	290000 291000 292000 293000 294000 295000 296000 297000 298000	277344 278258 279172 280086 281000 281913 282826 283739 284652 285564	8.969 8.967 8.964 8.958 8.956 8.955 8.950 8.948 8.945	3.905 -10 3.828 3.753 3.679 3.607 3.536 3.467 3.400 3.334 3.269	57308. 57453. 57599. 57744. 57890. 58035. 58181. 58327. 58473. 58619.	1.143 +15 1.122 1.102 1.082 1.062 1.043 1.024 1.006 7.877 +14	1144.1 1145.4 1146.6 1147.9 1149.2 1150.5 1151.7 1153.0 1154.3 1155.5	7.738 - 1 7.606 7.476 7.349 7.224 7.101 6.981 6.864 6.748 6.635	1.478 + 3 1.506 1.534 1.554 1.591 1.620 1.650 1.680 1.710	22.95 22.92 22.89 22.83 22.83 22.80 22.77 22.75 22.75 22.72
	300000 302000 304000 304000 308000 310000 312000 314000 316000 318000	286476 288299 290121 291942 293762 295581 297399 299215 301031 302845	8.942 8.937 8.932 8.926 8.921 8.916 8.910 8.905 8.899 8.894	3.206 -10 3.086 2.971 2.860 2.754 2.653 2.556 2.462 2.372 2.286	58765. 59012. 59260. 59507. 59755. 60004. 60253. 60501. 60751. 61000.	9.528 +14 9.201 8.886 8.583 8.291 8.011 7.741 7.482 7.232 6.992	1156.8 1158.9 1161.0 1163.0 1165.1 1167.2 1169.2 1171.3 1173.4 1175.4	6.524 - 1 6.311 6.106 5.908 5.718 5.534 5.358 5.187 5.023 4.865	1.773 + 3 1.836 1.901 1.968 2.038 2.109 2.182 2.258 2.336 2.416	22.66 22.60 22-54 22.49 22.43 22.37 22.31 22.26 22.20 22.14
	320000 322000 324000 326000 336000 330000 334000 334000 338000	304659 306471 308282 310092 311901 313709 315516 317322 319127 320930	8.889 8.878 8.878 8.868 8.862 8.857 6.852 8.854 8.846	2.204 -10 2.124 2.048 1.975 1.905 1.937 1.772 1.772 1.710 1.650 1.593	61250. 61500. 61750. 62001. 62251. 62502. 62754. 6305. 63257. 63509.	6.761 +14 6.538 6.324 6.118 5.919 5.727 5.543 5.365 5.193 5.028	1177.5 1.179.5 1181.5 1183.6 1185.6 1187.7 1189.7 1191.7 1.193.7 1195.8	4.712 - 1 4.565 4.423 4.286 5.154 4.026 5.903 3.784 3.670 3.559	2.499 + 3 2.584 2.671 2.762 2.854 2.950 3.048 3.149 3.253 3.490	22.08 22.03 21.97 21.91 21.86 21.80 21.74 21.69 21.63 21.58

TABLE II.—Continued

				GEOWIE	IIINIG AL	THODE, ME	TIMIC OF	4113	÷	
	Altii Z, m	ude H, m	Accel due to gravity	Specific weight ω, kg m² sec²	Pressure scale height	Number density	Particle speed V, m sec ⁻¹			Molecular weight M
	340000 342000 344000 346000 350000 352000 354000 358000	322733 324534 326335 328134 329932 331729 333525 335320 337114 338907	8.836 8.830 8.825 8.820 8.815 8.809 8.004 8.799 8.798	1.537 -10 1.484 1.433 1.383 1.336 1.290 1.247 1.204 1.164 1.125	H _p , m 63762. 64014. 64267. 64521. 64774. 65028. 65736. 65791. 66045.	4.869 +14 4.715 4.567 4.224 4.286 4.153 4.025 3.901 3.781	1197.8 1199.8 1201.8 1203.8 1205.8 1207.8 1209.8 1211.8 1213.8 1213.8	3.452 - 1 3.348 3.249 3.152 3.059 2.969 2.882 2.798 2.716 2.638		21.52 21.46 21.41 21.35 21.30 21.24 21.19 21.13 21.08 21.03
	360000 362000 364000 368000 370000 372000 374000 376000 378000	340699 342490 344279 346068 347856 349642 351427 353212 354995 356777	8.783 8.778 8.773 8.768 8.762 6.757 8.752 8.747 8.741	1.087 -10 1.051 1.016 9.820 -11 9.496 9.183 8.882 8.592 8.313 8.043	66300. 66556. 66811. 67067. 67324. 67580. 67837. 68094. 68351. 68608.	3.554 +14. 3.446 3.342 3.242 3.144 3.051 2.960 2.872 2.787 2.706	1217.7 1219.7 1221.7 1223.7 1225.6 1227.6 1229.6 1231.5 1233.5	2.562 - 1' 2.488 2.417 2.348 2.281 2.217 2.154 2.094 2.035 1.978	4.754 + 3 4.903 5.055 5.212 5.373 5.538 5.708 5.882 6.061 6.245	20.97 20.92 20.86 20.81 20.70 20.65 20.65 20.60 20.55
	380000 382000 384000 386000 380000 390000 392000 394000 398000	358559 360339 362118 363896 365673 367449 369223 370997 372770 374542	8.731 8.726 8.721 8.716 8.710 8.705 8.700 8.695 8.690 8.685	7.783 -11 7.533 7.291 7.058 6.833 6.616 6.407 6.205 6.010 5.822	68866. 69124. 69382. 69441. 69900. 70159. 70418. 70678. 71198.	2.626 +14 2.550 2.476 2.404 2.335 2.267 2.202 2.140 2.079 2.020	1237.4 1239.3 1241.3 1243.2 1245.2 1245.0 1249.0 1251.0 1252.9 1254.8	1.924 - 1 1.870 1.819 1.769 1.721 1.628 1.584 1.584 1.5542	6.433 + 3 6.626 6.825 7.028 7.237 7.451 7.671 7.896 8.127 8.364	20.44. 20.39 20.34 20.29 20.19 20.19 20.09 20.09
,	#00000 #02000 #0#000 #06000 #08000 #10000 #12000 #14000 #18000	376312 378082 379850 381618 383384 385150 386914 388677 390440 392201	8.679 8.669 8.664 8.659 8.654 8.654 8.649 8.644 8.638	5.640 —11 5.468 5.302 5.142 4.986 4.836 4.691 4.550 4.414 4.283	71459. 71673. 71888. 72103. 72318. 72533. 72749. 72964. 73180. 73396.	1.963 +14 1.909 1.856 1.806 1.756 1.709 1.662 1.617 1.574	1256.7 1258.2 1259.8 1261.3 1262.8 1264.3 1265.8 1267.3 1268.8 1270.3	1.460 - 1 1.422 1.384 1.348 1.313 1.279 1.245 1.213 1.182	8.607 + 3 8.851 9.101 9.357 9.619 9.888 1.016 + 4 1.045 1.074	19.94 19.89 19.84 19.79 19.75 19.70 19.60 19.60 19.56
	\$2000 \$22000 \$24000 \$24000 \$26000 \$30000 \$32000 \$34000 \$36000 \$36000	393961 395720 397478 399235 400991 402746 404500 404553 408005 409756	8.628 8.623 8.618 8.613 8.608 8.603 8.598 8.598 8.593 8.588	4.156 -11 4.033 3.913 3.778 3.687 3.579 3.474 3.373 3.275 3.180	73613. 73827. 74046. 74263. 74480. 74698. 74916. 75135. 75352.	1.490 +14 1.450 1.4.11 1.374 1.337 1.302 1.268 1.234 1.202 1.170	1271.8 1273.3 1274.8 1276.2 1277.7 1279.2 1280.7 1282.2 1283.7 1285.1	1.122 - 1 1.093 1.065 1.038 1.011 9.858 - 2 9.609 9.366 9.131 8.901	1.134 + 4 1.165 1.197 1.230 1.263 1.298 1.333 1.369 1.406	19-47 19-42 19-38 19-33 19-29 19-24 19-20 19-16 19-11
	##0000 ##2000 ###000 ##6000 #50000 #52000 #54000 #56000	411506 413255 415002 416749 418495 420240 421983 423726 425467 427208	8.577 8.572 8.567 8.562 8.557 8.552 8.5547 8.542 8.537 8.532	3.088 -11 2.999 2.913 2.830 2.749 2.670 2.594 2.594 2.594 2.521 2.450 2.381	75789. 76007. 76226. 76445. 76665. 76885. 77104. 77325. 77545.	1.140 +14 1.110 1.081 1.025 1.026 9.991 +13 9.733 9.483 9.240 9.003	1286.6 1288.1 1289.6 1291.0 1292.5 1294.0 1295.5 1296.9 1298.4 1299.8	8.678 - 2 8.462 8.251 8.046 7.846 7.652 7.463 7.280 7.101 6.927	1-483 + 4 1-522 1-565 1-605 1-647 1-736 1-736 1-782 1-828 1-876	19.03 18.99 18.94 18.90 18.86 18.82 18.78 18.74 18.70 18.66
e)i	#60000 #62000 #64000 #66000 #86000 #70000 #72000 #74000 #76000	428948 430486 432424 434160 435896 437630 439364 441096 442828 444558	8.527 8.522 8.517 8.512 8.507 8.502 8.497 8.492 8.487 8.482	2.314 -11 2.249 2.186 2.125 2.066 2.009 1.953 1.897 1.796	77986. 78207. 78428. 78650. 78871. 79093. 79315. 79537. 79760. 79983.	8.773 +13 8.550 8.333 8.121 7.916 7.716 7.522 7.333 7.149 6.970	1301.3 1302.8 1304.2 1305.7 1307.1 1308.6 1310.0 1311.5 1312.9	6.758 - 2 6.593 6.433 6.276 6.124 5.976 5.832 5.692 5.556 5.423	1-926 + 4 1-976 2-028 2-080 2-134 2-190 2-246 2-304 2-363 2-424	18.63 18.59 18.55 18.51 18.48 18.44 18.40 18.37 18.33
	#80000 #84000 #84000 #86000 #88000 #90000 #94000 #94000	446287 448016 449743 451469 453195 454919 45642 458365 46086	8.477 8.472 8.467 8.462 8.453 8.453 8.448 8.443 8.438	1.747 -11 1.699 1.653 1.608 1.505 1.522 1.481 1.441 1.403	80206. 80429. 80652. 80876. 81300. 81324. 81548. 81772. 81997.	6.796 +13 6.627 6.462 6.302 6.146 5.994 5.886 5.703 5.563 5.426	1315.8 1317.3 1318.7 1320.2 1321.6 1323.0 1324.5 1325.9 1327.3 1328.8	5.293 - 2 5.167 5.044 4.924 4.808 4.694 4.583 4.475 4.370 4.268 -	2.486 + 4 2.549 2.614 2.749 2.819 2.890 2.963 3.037 3.113	18.26 18.23 18.19 18.16 18.13 18.10 18.06 18.03 18.00 17.97

TABLE II.—Continued

				o . —		<u></u>				
	Altit		Accel. due to	Specific weight	Pressure scale height	Number density	Particle speed	Collision frequency	Mean free path	Molecular weight
	Z, m	H, m	g,msec ⁻²	weight ω,kg m ⁻² sec ⁻²	H _e , m	n, m ⁻³	⊽, m sec ^{-t}	ν, sec ⁻¹	Ŀ, m	M
	500000 502000 504000 504000 508000 510000 512000 514000 514000 518000	463526 465244 466961 468678 470393 472107 473821 475533 477244 478954	8.428 8.423 8.418 6.413 6.403 8.403 8.398 8.394 8.389	1.329 -11 1.295 1.261 1.261 1.197 1.196 1.107 1.079 1.051	82447. 82611. 82775. 82940. 83104. 83269. 83434. 83598. 83764. 83929.	5.294 +13 5.169 5.046 4.927 4.811 4.698 4.587 4.480 4.375 4.272	1330.2 1331.1 1332.1 1333.0 1333.9 1334.9 1335.8 1336.7 1337.7	4.168 - 2 4.072 3.979 3.888 3.799 3.712 3.627 3.544 3.464 3.385	3.191 + 4 3.269 3.348 3.429 3.512 3.596 3.683 3.771 3.862 3.955	17.94 17.88 17.85 17.82 17.79 17.16 17.74 17.71
	52000 52200 52400 52400 52600 53600 53200 53400 53600 53600	480664 482372 484079 485786 487491 489195 490899 492601 494303 496003	8.379 8.374 8.369 8.364 8.359 8.355 8.350 8.345 8.345 8.345	1.025 -11 9.987 -12 9.734 9.487 9.248 9.248 8.786 8.567 8.352 8.143	84094. 84260. 84425. 84591. 84757. 84923. 85089. 85256. 85422. 85589.	4.172 +13 4.075 3.980 3.887 3.796 3.708 3.622 3.538 3.456 3.376	1339.5 1340.4 1341.4 1342.3 1343.2 1344.1 1345.1 1346.0 1346.9	3.308 - 2 3.233 3.160 3.088 3.018 2.950 2.884 2.819 2.755 2.693	4.049 + 4 4.146 6.245 4.347 4.450 4.556 4.664 4.775 4.888 5.004	17.65 17.63 17.60 17.58 17.55 17.52 17.50 17.48 17.45
	54000 542000 544000 546000 556000 552000 552000 556000 558000	497702 499401 501098 502795 504490 506185 507878 509571 511262 512953	8.330 8.325 8.321 8.316 8.311 8.306 8.301 8.297 8.297 8.292 8.287	7.940 -12 7.742 7.549 7.362 7.179 7.002 6.829 6.660 6.497 6.337	85756. 85923. 86090. 86258. 86425. 86593. 86761. 86928. 87097.	3.298 +13 3.222 3.145 3.075 3.005 2.936 2.868 2.803 2.739 2.676	1348.8 1349.7 1350.6 1351.5 1352.4 1353.4 1354.3 7355.2 1356.1	2.633 - 2 2.574 2.516 2.460 2.405 2.352 2.299 2.248 2.198 2.150	5.122 + 4 5.243 5.367 5.493 5.623 5.755 5.890 6.028 6.169 6.313	17.40 17.38 17.36 17.34 17.31 17.29 17.27 17.25 17.23
	560000 562000 564000 566000 578000 572000 574000 576000 578000	514642 516331 518018 519705 521391 523075 524759 526442 528124 529805	8.282 8.277 8.273 8.268 8.263 8.258 8.253 8.249 8.249 8.244 8.239	6.182 -12 6.030 5.883 5.740 5.600 5.464 5.331 5.202 5.077 4.954	87433. 87602. 87770. 87939. 88108. 88277. 88447. 88646. 88786.	2.615 +13 2.556 2.497 2.441 2.385 2.331 2.278 2.227 2.127 2.128	1357.9 1358.9 1359.8 1360.7 1361.6 1362.5 1363.4 1364.3 1365.2	2.102 - 2 2.055 2.010 1.966 1.922 1.880 1.798 1.759 1.721	6-460 + 4 6-611 6-765 6-922 7-083 7-247 7-415 7-586 7-761 7-940	17.19 17.17 17.15 17.13 17.11 17.09 17.07 17.06 17.04 17.02
	580000 582000 584000 586000 588000 592000 592000 594000 598000	531484 533163 534841 536518 538194 539869 541543 544888 546559	8.234 8.230 8.225 8.220 8.215 8.211 8.206 8.201 8.196 8.192	4.035 -12 4.719 4.05 5.495 4.388 4.283 4.181 4.082 3.985 3.890	89125. 89295. 89466. 89636. 89806. 89977. 90148. 90319. 90490. 90661.	2.080 +13 2.033 1.987 1.943 1.899 1.857 1.816 1.775 1.736 1.697	1367.1 1368.0 1368.9 1369.8 1370.7 1371.6 1372.5 1373.4 1374.3	1.683 - 2 1.646 1.610 1.575 1.551 1.508 1.475 1.443 1.443 1.412	8.123 + 4 8.310 8.501 8.696 8.695 9.098 9.306 9.518 9.734 9.956	17.00 16.98 16.97 16.95 16.93 16.92 16.90 16.89 16.87
	60000 602000 604000 606000 608000 610000 614000 614000 618000	548230 549899 551567 553234 554901 556566 558230 558230 5581556 563218	8.187 8.182 8.178 8.173 8.168 8.164 8.159 8.159 8.159 8.149	3.798 -12 3.710 3.625 3.554 3.459 3.380 3.302 3.226 3.152 3.080	90833. 90962. 91092. 91221. 91351. 91481. 91611. 91741. 91871. 92002.	1.659 +13 1.623 1.588 1.554 1.5520 1.487 1.455 1.424 1.393 1.363	1376.1 1376.7 1377.3 1377.9 1378.5 1379.0 1379.6 1380.2 1380.8 1381.4	1.352 - 2 1.323 1.295 1.267 1.240 1.214 1.188 1.163 1.139 1.115	1.018 + 5 1.041 1.064 1.087 1.111 1.136 1.161 1.187 1.213 1.239	16.84 16.82 16.81 16.79 16.78 16.75 16.75 16.74 16.72
0.0	620000 624000 624000 626000 626000 638000 632000 634000 634000	564879 566538 568197 569855 571511 573167 574822 576476 578129 579781	8-140 8-135 8-131 8-126 8-121 8-117 8-112 8-108 3-103 8-098	3.009 -12 2.941 2.874 2.808 2.744 2.662 2.621 2.562 2.504 2.447	92132. 92263. 92393. 92524. 92655. 92786. 92917. 93048. 93179.	1.334 +13 1.305 1.277 1.250 1.223 1.197 1.171 1.146 1.122 1.098	1381.9 1382.5 1383.1 1383.7 1384.9 1385.4 1385.4 1386.0 1386.6	1.091 - 2 1.068 1.046 1.024 1.002 9.811 - 3 9.606 9.405 9.208 9.016	1-267 + 5 1-294 1-323 1-352 1-381 1-412 1-442 1-474 1-506 1-539	16.69 16.68 16.65 16.65 16.63 16.61 16.60 16.59
an and an an an an an an an an an an an an an	65000 658000 658000 658000 658000 658000 658000	581432 583082 584732 586380 588027 5876319 591319 592964 594607 596250	8.094 8.089 8.084 8.080 8.075 8.070 8.066 8.061 8.057	2.392 ~12 2.338 2.285 2.234 2.184 2.135 2.087 2.040 1.995	93442. 93574. 93705. 93837. 93969. 94101. 94233. 94365. 94498. 94630.	1:075 +13 1:052 1:030 1:008 9:866 +12 9:658 9:455 9:256 9:061 8:871	1387.8 1388.3 1368.9 1389.5 1390.1 1390.6 1391.2 1391.8 1392.4 1393.0	8.828 - 3 8.645 8.465 8.290 8.118 7.786 7.625 7.468 7.314	1.572 + 5 1.606 1.641 1.676 1.712 1.719 1.787 1.825 1.865 1.904	16.56 16.55 16.53 16.52 16.51 16.50 16.48 16.47

TABLE II.—Concluded
GEOMETRIC ALTITUDE, METRIC UNITS

Alti	ude H, m	Accel. due to	Spacifió	Pressure scale	Number density n, m ⁻³	Particle speed V, m sec ⁻¹	Collision frequency $ u$, sec-1	Mean free path L, m	Molecular weight
660000 662000 664000 666000 670000 672000 674000 678000	597892 599532 601172 602811 604449 606086 607722 609357 616991 612625	8.047 8.043 8.038 8.034 8.029 8.025 8.025 8.015 8.011	1.907 -12 1.865 1.863 1.783 1.743 1.705 7.667 1.630 1.594 1.559	H _p , m 94762. 94895. 95028. 95161. 95294. 95427. 955603. 95693. 95960.	8.685 +12 8.504 8.326 8.152 7.982	1393.5 1394.1 1394.7 1395.3 1395.8 1396.4 1397.0 1397.6 1398.1	7.164 - 3 7.017 6.873 6.733 6.573 6.461 6.329 6.200 6.075 5.951	1.945 + 5 1.987 2.029 2.072 2.116 2.161 2.207 2.254 2.350	16-43 16-42 16-41 16-39 16-38 16-37 16-35 16-33 16-33
680000 682000 684000 684000 688000 692000 692000 694000 698000	614257 613889 617519 619149 620777 622405 624032 625658 627283 628907	8.002 7.997 7.993 7.988 7.984 7.979 7.974 7.970 7.965 7.961	1.525 -12 1.492 1.459 1.427 1.396 1.365 1.335 1.306 1.278 1.250	96093. 96227. 96361. 96495. 96629. 96763. 97031. 97166. 97300.	7.040 +12 5.895 6.753 6.615 6.479 6.347 6.217 6.090 5.966 5.885	1399.3 1399.9 1400.4 1401.0 1401.6 1402.2 1402.7 1403.3 1403.9 1404.5	5.831 - 3 5.713 5.598 5.485 5.375 5.267 5.162 5.058 4.958 4.859	2.400 + 5 2.450 2.502 2.505 2.608 2.662 2.718 2.774 2.832 2.891	16.30 16.29 16.28 16.26 16.25 16.24 16.22 16.21 16.20 16.18
700000	630530	7.956	1.223 -12	97435.	5.726 +12	1405.0	4.762 — 3	2.950 + 5	16-17
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Table III

SOUND SPEED, COEFFICIENT OF VISCOSITY, KINEMATIC VISCOSITY, AND THERMAL CONDUCTIVITY

Metric Units

Note: A one- or two-digit number (preceded by a plus or minus sign) following the initial entry of each block indicates the power of ten by which that entry and each succeeding entry of that block should be multiplied. A change of power occurring within a block is indicated by a similar notation.

TABLE III

GEOPOTENTIAL ALTITUDE, METRIC UNITS

ΔIti	lude	Sound	T	of viscosity	<u> </u>		Thermal co	anduotivitu
	T	speed					Thermal C	
H, m	Z, m̂:	C _S ,	μ, kg m ⁻¹ sec ⁻¹	$\frac{\mu}{\mu_0}$	η, m² sec-1	$\frac{\eta}{\eta_0}$	k, k-cal m ⁻¹ sec ⁻¹ (°K) ⁻¹	k k _o
-5000 -4950 -4950 -4850 -4850 -4750 -4700 -4650 -4650 -4550	-4996 -4946 -4896 -4846 -4796 -4746 -4647 -4647 -4597	358.972 358.790 358.608 358.426 358.244 358.061 357.879 357.696 357.514 357.331	1.9421 - 5 1.9406 1.9391 1.9377 1.9362 1.9347 1.9332 1.9317 1.9302 1.9267	1.08536 + 0 1.08453 1.08370 1.08286 1.08203 1.08120 1.08036 1.07953 1.077869	1.0060 - 5 1.0096 1.0132 1.0168 1.0204 1.0227 1.0314 1.0351 1.0388	6-88727 - 1 6-91175 6-93635 6-96106 6-98588 7-01081 7-03586 7-06102 7-08629 7-11168	6.6540 - 6 6.6481 6.6422 6.6352 6.6303 6.6244 6.6185 6.6126 6.6005	1.09928 + 0 1.09831 1.09733 1.09635 1.09537 1.09439 1.09382 1.09284 1.09186
-4500 -4450 -4400 -4350 -4300 -4250 -4200 -4150 -4100 -4050	-4497 -4447 -4397 -4347 -4297 -4247 -4197 -4197 -4047	357.148 356.965 356.782 356.599 356.416 356.233 356.049 355.866 355.682 355.499	1.9272 - 5 1.9257 1.9242 1.9227 1.9212 1.9197 1.9182 1.9157 1.9152	1.07702 + 0 1.07619 1.07535 1.07451 1.07367 1.07284 1.07200 1.07116 1.07032 1.06948	1.0425 - 5 1.0463 1.05500 1.0538 1.0576 1.0614 1.0653 1.0691 1.0730 1.0768	7.13718 - 1 7.16280 7.18854 7.21439 7.24037 7.26646 7.29267 7.34546 7.37203	6.5948 - 6 6.5888 6.5829 6.5770 6.5710 6.5551 6.5591 6.5532 6.5472 6.5413	1.08950 + 0 1.08852 1.08857 1.08556 1.08557 1.08459 1.08361 1.08263 1.08165 1.08066
-4000 -3950 -3900 -3850 -3850 -3750 -3750 -3650 -3650 -3550	-3997 -3948 -3898 -3848 -3798 -3748 -3698 -3648 -3598 -3548	355.315 355.131 354.947 354.763 354.579 354.375 354.210 354.026 353.841 353.657	1.9122 - 5 1.9107 1.9092 1.9077 1.9062 1.9047 1.9032 1.9017 1.9002 1.8986	1.06864 + 0 1.06780 1.06696 1.06612 1.06528 1.06483 1.06359 1.06275 1.06275	1.0807 - 5 1.0847 1.0886 1.0926 1.0965 1.1005 1.1045 1.1086 1.1126	7.39873 - 1 7.42555 7.45249 7.47956 7.50675 7.53407 7.56151 7.58909 7.61679 7.64461	6.5353 - 6 6.5294 6.5234 6.5175 6.5115 6.5055 6.4996 6.4936 6.4817 6.4817	1.07968 + 0 1.07870 1.07771 1.07673 1.07574 1.07476 1.07377 1.07279 1.07180 1.07082
-3500 -3450 -3400 -3350 -3350 -3250 -3250 -3150 -3150 -3050	-3498 -3448 -3398 -3348 -3298 -3248 -3148 -3148 -3098 -3049	353.472 353.287 353.102 352.917 352.732 352.547 352.362 352.177 351.991 351.805	1.8971 - 5 7.8956 1.8941 1.8926 1.8911 1.8896 1.8860 1.8850 1.8850	1.05022 + 0 1.05937 1.05853 1.05768 1.05683 1.05599 1.05514 1.05529 1.055245 1.055260	1.1207 - 5 1.1249 1.1290 1.1331 1.1373 1.1415 1.1457 1.1499 1.1541	7.67257 - 1 7.70066 7.72888 7.75723 7.78571 7.81433 7.64307 7.87196 7.90098 7.93013	6.4757 - 6 6.4697 6.4638 6.4578 6.4518 6.4458 6.4458 6.4399 6.4399 6.4279 6.4219	1.06983 + 0 1.06884 1.06786 1.06588 1.06588 1.06489 1.06391 1.06292 1.06193
-3000 -2950 -2900 -2850 -2850 -2750 -2750 -2650 -2650 -2550	-2999 -2949 -2899 -2849 -2799 -2749 -2699 -2649 -2599	351.620 351.434 351.248 351.062 350.876 350.690 350.504 350.317 350.131	1.8820 - 5 1.8805 1.8759 1.8774 1.8759 7.8744 1.8728 1.5713 1.8698	1.05175 + 0 1.05090 1.05090 1.05005 1.04920 1.04835 1.04750 1.04665 1.04580 1.04594	1.1626 - 5 1.1669 1.1713 1.1756 1.1800 1.1843 1.1843 1.1897 1.1932	7.95942 - 1 7.9885 8.01842 8.04812 8.07797 8.10796 8.13809 8.14836 8.19877 8.22933	6.8159 - 6 6.8099 6.8039 6.3919 6.3859 6.3799 6.3739 6.3739 6.3619	1.05995 + 0 T.05896 1.05797 1.05698 1.05599 1.05500 1.05401 1.05301 1.05202 1.05103
-2500 -2450 -2400 -2350 -2350 -2300 -2250 -2200 -2150 +2100 -2050	-2499 -2449 -2399 -2349 -2249 -2149 -2149 -2099 -2049	349.758 349.571 349.384 349.197 349.010 348.823 348.636 348.448 348.261 348.073	1.8667 - 5 1.8652 1.8637 1.8637 1.8595 1.8596 1.8596 1.8545 1.8545	1.04324 + 0 1.04238 1.04153 1.041068 1.03982 1.03897 1.03811 1.03725 1.03640 1.03554	1.2066 - 5 1.2111 1.2156 1.2201 1.2247 1.2293 1.2339 1.2339 1.2386 1.2432	8.26003 - 1 8.29088 8.32188 8.35302 8.38431 8.41575 8.44734 8.47909 8.51098	6.3559 - 6 6.3849 6.33379 6.3319 6.3258 6.3138 6.3078 6.3018	1.05004 + 0 1.04905 1.04805 1.04706 1.04506 1.04507 1.04408 1.04508 1.04508
-2000 -1950 -1900 -1850 -1600 -1750 -1700 -1650 -1550	-1999 -1949 -1849 -1849 -1790 -1750 -1650 -1650 -1550	347.685 347.698 347.510 347.322 347.134 346.946 346.757 346.569 346.380 346.192	1.6314 - 5 1.8499 1.8468 1.8468 1.8453 1.8453 1.8422 1.8407 1.8391 1.8376	1.03468 + 0 1.03382 1.03296 1.03211 1.03125 1.03039 1.02953 1.02867 1.02780 1.02694	1.2526 - 5 1.2573 1.2621 1.2628 1.2716 1.2765 1.2813 1.2862 1.2910 1.2960	8.57522 - 1 8.60757 8.64008 8.67275 8.70557 8.73855 8.77169 8.80498 8.83843 8.83843	6.2957 - 6 6.2897 6.2837 6.2776 6.2716 6.2656 6.2656 6.2535 6.2535 6.2474 6.2414	1.04009 + 0 1.03910 1.03810 1.03711 1.03511 1.03511 1.03311 1.03311 1.03311
-1500 -1450 -1400 -1350 -1300 -1250 -1200 -1150 -1100 -1050	-1500 -1450 -1400 -1350 -1300 -1250 -1200 -1150 -1100	346.003 345.814 345.626 345.437 345.247 345.058 344.869 344.680 344.490 344.490	1.8360 - 5 1.8345 1.8330 1.8314 1.8293 1.8283 1.8268 1.8252 1.8237 1.8221	1.02608 ÷ 0 1.02522 1.02435 1.02349 1.02263 1.02176 1.02090 1.02003 1.01917 1.01830	1.3009 - 5 1.3059 1.3108 1.3159 1.3209 1.3259 1.3310 1.3361 1.3464	3.90585 - 1 8.93980 8.97391 9.00818 9.04263 9.07724 9.14202 9.14697 9.18209 9.21738	6.2353 - 6 6.2293 6.2232 6.2172 6.2171 6.2051 6.1990 6.1930 6.1889	1.03012 + 0 1.02912 1.02812 1.02812 1.02712 1.02512 1.022512 1.02212 1.02212 1.02212
					<u> </u>			

TABLE III
GEOMETRIC ALTITUDE, METRIC UNITS

Altit	ude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal co	nductivity
Z, m	; H _i m≐	C _S ,	μ,	$\frac{\mu}{\mu_0}$	· η, . m² sec-!	$\frac{\eta}{\eta_0}$	k-cal m=1 sec=1(°K)=1	<u>k.</u> k _o
-5000 -4950 -4950 -4850 -4850 -4750 -4700 -4650 -4650 -4550	-5004 -4954 -4954 -4854 -4864 -4754 -4703 -4603 -4603	358.986 358.804 358.622 358.439 358.257 358.074 357.891 357.709 357.526 357.343	1.9422 - 5 1.9807 1.9393 1.9378 1.9353 1.9388 1.9338 1.9318 1.9318	1.08543 + 0 1.08459 1.08376 1.08293 1.08209 1.08126 1.08042 1.07958 1.07675 1.07791	1.0058 - 5 1.0093 1.0129 1.0165 1.0202 1.0238 1.0275 1.0312 1.0339	6.88534 - 1: 6.90986 6.93449 6.95922 6.98407 7.00904 7.03411 7.05930 7.08460 7.11002	6.65%5 - 6 6.6%85 6.6%26 6.63367 6.63308 6.62%8 6.6189 6.6130 6.6070 6.6011	1.09936 + 0 1.09838 1.09740 1.09642 1.09544 1.09348 1.09250 1.09152 1.09054
\$500 \$450 \$400 \$4350 \$4360 \$4250 \$4260 \$4150 \$4100 \$4050	-4503 -4453 -4403 -4353 -4303 -4253 -4203 -4153 -4103 -4053	357-160 356-977 356-793 356-610 356-427 356-243 356-059 355-876 355-692 355-508	1.9273 - 5 1.9258 1.9243 1.9243 1.9223 1.9213 1.9183 1.9188 1.9153	1.07708 + 0 1.07624 1.07540 1.07356 1.07372 1.07372 1.07204 1.07120 1.07120 1.07036	1.0423 - 5 1.0498 1.0536 1.0536 1.0574 1.0612 1.0650 1.0689 1.0728	7.13553 = 1 7.16120 7.18697 7.21285 7.23885 7.26497 7.27171 7.31757 7.33405 7.37066	6.5951 - 6 6.5892 6.5833 6.5773 6.5714 6.5654 6.5595 6.5535 6.55475 6.5416	1.08956 + 0 1.08568 1.08563 1.08563 1.08465 1.08366 1.08268 1.08170 1.08071
-4000 -3950 -3900 -3650 -3800 -3750 -3700 -3650 -3650	-4003 -3952 -3902 -3852 -3852 -3752 -3702 -3652 -3602 -3552	355.324 355.140 354.956 354.772 354.587 354.403 354.218 354.034 353.849 353.664	1.9123 - 5 1.9108 1.9093 1.9078 1.9063 7.9047 1.9032 1.9017 1.9017	1.06868 + 0 1.06780 1.06700 1.06616 1.06531 1.06847 1.06363 1.06278 1.06109	1.0806 - 5 1.0885 1.0884 1.0924 1.0963 1.1003 1.1044 1.1084 1.1124 1.1165	7.39738 - 1 7.42423 7.45120 7.47829 7.50551 7.53286 7.56033 7.58793 7.61565 7.64351	6.5356 - 6 6.5297 6.5237 6.5177 6.5118 6.5058 6.4998 6.4939 6.4819	1.07973 + 0 P.07874 1.07776 1.07577 T.07579 T.07480 1.07382 1.07283 1.07184
-3500 -3450 -3400 -3350 -3350 -3250 -3250 -3150 -3150 -3050	-3502 -3452 -3402 -3352 -3302 -3252 -3252 -3152 -3102 -3051	353.479 353.294 353.109 352.924 352.739 352.739 352.368 352.182 351.997 351.811	1.8972 - 5 1.8957 1.8942 1.8926 1.8911 1.8896 1.8881 1.8866 1.8851	1.06025 + 0 1.05940 1.05856 1.05771 1.05686 1.05602 1.05517 1.05432 1.05347	1-1206 - 5 1-1247 1-1288 1-1330 1-1371 1-1413 1-1455 1-1497 1-1540 1-1562	7.67149 - 1 7.69960 7.72785 7.75622 7.78473 7.81337 7.81337 7.87105 7.90010 7.92927	6.4759 - 6 6.4700 6.4640 6.4530 6.4520 6.4460 6.4400 6.4281 6.4221	1.06987 + (1.06888 1.06789 1.06690 1.06592 1.06394 1.06394 1.06295 1.06196 1.06097
-3000 -2950 -2900 -2850 -2800 -2750 -2700 -2650 -2650 -2550	-3001 -2951 -2901 -2851 -2801 -2751 -2701 -2651 -2601 -2551	351.625 351.439 351.253 351.067 350.694 350.508 350.321 350.135 349.948	1.8820 - 5 1.8805 1.8790 1.8775 1.8759 1.8744 1.8729 1.8714 1.8683	1.05177 + 0 1.05092 1.05097 1.04922 1.04837 1.04752 1.04667 1.04581 1.04496 1.04411	1-1625 - 5 1-1668 1-1712 1-1755 1-1799 1-1842 1-1886 1-1931	7.95859 1 7.98804 8.01763 8.04736 8.07723 8.10724 8.13739 8.16769 8.22870	6. 1161 - 6 6. 4101 6. 4041 6. 3921 6. 3921 6. 3861 6. 3741 6. 3681 6. 3620	1.05998 + (1.05899 1.05800 1.0570.1: 1.05501 1:05502 1.05503 1.05304 1.05204 1.05105
-2500 -2450 -2400 -2350 -2350 -2250 -2250 -2150 -2150 -2050	-2501 -2451 -2401 -2351 -2301 -2251 -2201 -2101 -2101 -2051	349.761 349.574 349.387 349.200 349.013 348.626 348.638 348.638 348.263 348.263	1.8668 - 5 1.8452 1.8637 1.8622 1.8607 1.8591 1.8576 1.8556 1.8545	1.04325 + 0 1.04240 1.04155 1.04069 1.03983 1.03898 1.03812 1.03727 1.03641	1.2065 - 5 1.2110 1.2155 1.2201 1.2246 1.2292 1.2338 1.2385 1.2478	8.25943 - 1 8.29030 8.32132 8.35248 8.38379 5.41525 6.44686 8.47862 8.51053 8.54260	6.3560 - 6 6.3500 6.3580 6.3380 6.3320 6.3259 6.3199 6.3199 6.3079 6.3018	1.05006 + (1.04906 - (1.04807 1.04708 1.04608 1.04509 1.04409 1.04310 1.04210 1.04110
-2000 -1950 -1900 -1850 -1800 -1750 -1700 -1650 -1600 -1550	-2001 -1951 -1961 -1861 -1861 -1750 -1760 -1650 -1650 -1650	347.888 347.700 347.512 347.324 347.324 346.947 346.759 346.571 346.382 346.193	1.8515 - 5 1.8499 1.8484 1.8453 1.8438 1.8438 1.8422 1.8407 1.8391	1.03469 + 0 1.03383 1.03297 1.03212 1.03126 1.03039 1.02953 1.02867 1.02781 1.02695	1.2525 - 5 1.2573 1.2620 1.2668 1.2716 1.27764 1.2813 1.2861	8.57481 - 1 8.60719 8.63971 8.67239 8.70523 8.73823 8.77138 8.80470 8.83817 8.87161	6.2958 - 6 6.2898 6.2837 6.2777 6.2717 6.2656 6.2596 6.2595 6.2875 6.2414	1.04011 + (1.03911 1.03811 1.03712 1.03612 1.03512 1.03812 1.03812 1.03212 1.03212
-1500 -1450 -1400 -1350 -1300 -1250 -1200 -1150 -1100 -1050	-1500 -1450 -1400 -1350 -1300 -1250 -1200 -1150 -1100 -1050	346.005 345.816 345.627 345.438 345.248 345.057 344.680 344.680 344.491 344.301	1.8361 - 5 1.8345 1.8330 1.8314 1.8299 1.8283 1.8268 1.8252 1.8237 1.8237	1.02609 + 0 1.02522 1.02536 1.02350 1.02263 1.02177 1.02090 1.02004 1.01917 1.01830	1.3009 - 5 1.3058 1.3108 1.3158 1.3259 1.3259 1.3310 1.3341 1.3412	8.90561 - 1 8.93957 8.97370 9.00799 9.00797 9.10707 9.11186 9.11682 9.18195 9.21726	6.2354 - 6. 6.2293 6.2233 6.2172 6.2112 6.2051 6.1990 6.1930 6.1869 6.1869	1.03013 + (1.02013 1.02013 1.02013 1.02015 1.02015 1.02312 1.02312 1.02212

TABLE III. - Continued.

GEOPOTENTIAL ALTITUDE, METRIC UNITS

A 14:		Sound		OTENTIAL ALI	r	· · · · · · · · · · · · · · · · · · ·		1 11 21
Aim	Altitude speed Coefficient of				Kinematic		i nermal d	conductivity
H, m	Z, m	C _{S1}	μ, kg·m ⁻¹ sec ^{-1.}	$\frac{\mu}{\mu_0}$	η, m² sec	$\frac{\eta}{\eta_0}$	k-cal m ⁻¹ sec ⁻¹ (°K) ⁻¹	k ko
-1000 -950 -900 -850 -800 -750 -750 -650 -600 -550	-1000 -950 -900 -850 -800 -750 -700 -650 -600 -550	344.111 343.921 343.731 343.541 343.351 343.351 342.970 342.789 342.589 342.396	1.8206 - 5 1.8190 1.6175 1.8159 1.8159 1.8128 1.813 1.8097 1.8081 1.8066	1.01743 + 0 1.01657 1.01570 1.01483 1.01396 1.01222 1.01135 1.01048	1.3516 - 5 1.3568 1.3620 1.3673 1.3726 1.3779 1.3832 1.3886 1.3939 1.3994	9.25284 - 1 9.28848 9.32429 9.36028 9.39644 9.45279 9.46931 9.50607 9.504289 9.57995	6.1748 - 6 6.1687 6.1626 6.1566 6.1565 6.1444 6.1383 6.1322 6.1202	1.02011 + 0 1.01911 1.01811 1.01710 1.01510 1.01510 1.01809 1.01309 1.01208
-500 -450 -400 -350 -300 -250 -200 -150 -100	-500 -450 -400 -350 -300 -250 -200 -150 -100	342.208 342.017 341.826 341.635 341.443 341.252 341.061 340.869 340.678 340.486	1.8050 - 5 1.8035 1.8019 1.8003 1.7988 2.7972 1.7956 1.7941 1.7925 1.7909	1.0087% + 0 1.00767 1.00700 1.00612 1.00525 1.00438 1.00350 1.00263 1.00175 1.00088	1.4048 5 1.4103 1.4158 1.4213 1.4228 1.4324 1.4380 1.4493 1.4493	9.61720 - 1 9.65463 9.69225 9.73005 9.76804 9.80522 9.88459 9.88315 9.92190 9.96085	6.1140 - 6 6.1079 6.1018 6.0957 6.0895 6.0835 6.0774 6.0713 6.0552 6.0591	1.01007 + 0 1.00907 1.00906 7.00705 1.00605 1.00504 1.00403 1.00303 1.00303
50 100 150 200 250 300 350 400 450	50 100 150 200 250 300 350 800 450	340.294 340.102 339.910 339.718 339.525 339.333 339.141 338.948 338.755 338.562	1.7894 - 5 1.7878 1.7862 1.7887 1.7831 1.7815 1.7800 1.7784 1.77768	1.00000 + 0 9.99124 - 1 9.98246 9.97369 9.96491 9.95612 9.94733 9.93654 9.92974	1.4607 - 5 1.4765 1.4726 1.4780 1.4889 1.4887 1.4956 1.5015 1.5075	1.00000 + 0 1.00393 + 0 1.00789 1.01.186 1.01585 1.01585 1.02390 1.02390 1.02390 1.03612	6.0530 - 6 6.0459 6.0408 6.0347 6.0286 6.0225 6.0164 6.0102 6.0041 5.9980	1.00000 + 0 9.98991 - 1 9.97982 9.98972 9.95963 9.94952 9.93942 9.92931 9.91920 9.90908
500 550 600 650 700 750 800 850 900	500 550 600 650 700 750 800 850 900 950	338.369 338.176 337.983 337.790 337.597 337.403 337.209 337.016 336.822 336.628	1.7737 - 5 1.7721 1.7705 1.7689 1.7658 1.7658 1.7642 1.7640 1.7610	9.91213 - 1 9.90331 9.89%49 9.88567 9.8768% 9.86801 9.85917 9.85933 9.8%148	1.5195 - 5 1.5255 1.5316 1.5317 1.5438 1.5500 1.5562 1.5624 1.5624 1.5687	1.04024 + 0 1.04437 1.04853 1.05271 1.05690 1.06113 1.06537 1.06963 1.07392	5.9919 - 6 5.9857 5.9736 5.9735 5.9674 5.9612 5.9551 5.9489 5.9867	9.89896 - 1 9.88884 9.87872 9.86859 9.85846 9.84832 9.83818 9.82804 9.81790 9.80775
1000 1050 1100 1150 1200 1250 1300 1350 1400 1450	1000 1050 1100 1150 1250 1250 1350 1400 1450	336.434 336.240 336.045 335.851 335.657 335.462 335.267 335.267 335.072 334.877	1.7578 - 5 1.7563 1.7547 1.7531 1.7515 1.7819 1.7483 1.7465 1.7451	9.82377 ~ 1 9.81491 9.80604 9.79717 9.78829 9.77941 9.77052 9.76163 9.75273 9.74383	1.5813 - 5 1.5877 1.5940 1.4005 1.4009 1.6134 1.6199 1.6265 1.6331	1.08255 + 0 1.08690 1.09128 1.09567 1.10009 1.10453 1.10899 1.11348 1.11799	5.9305 - 6 5.9244 5.9182 5.9121 5.9059 5.8976 5.8975 5.8875 5.8813 5.8751	9.79760 - 1 9.78745 9.77729 9.76713 9.75696 9.74680 9.73663 9.72645 9.71628 9.70610
1500 1550 1600 1650 1700 1750 1800 1850 1900	1500 1550 1600 1650 1700 1750 1801 1851 1901	334.292 334.292 354.096 333.901 333.705 333.510 353.314 333.118 332.922 332.725	1.7419 = 5 1.7404 1.7388 1.7372 1.7350 1.7350 1.7324 1.7308 1.7272	9.73h92 - 1 9.72601 9.71709 9.70817 9.69925 9.69032 9.68138 9.672kh 9.672kh	1.6463 - 5 1.6539 1.6598 1.6663 1.6733 1.6801 1.6870 1.6935 1.7008	1.12708 + 0 1.13160 1.13626 1.14089 1.14554 1.15022 1.15492 1.15964 1.16439 1.16439	5.8690 - 6 5.8566 5.8505 5.8505 5.8381 5.8381 5.8319 5.8176 5.8134	9.69591 - 1 9.68573 9.67554 9.66534 9.65515 9.63495 9.63474 9.62454 9.61433 9.60412
2600 2050 2100 2150 2200 2250 2300 2350 2400 2450	2001 2051 2101 2151 2201 2251 2301 2351 2401 2451	352.529 352.333 352.136 331.939 331.743 331.546 331.349 331.152 330.954 330.757	1.7260 - 5 1.7244 1.7228 1.7211 1.7195 1.7179 1.7163 1.7163 1.7131	9.64558 - 1 9.63662 9.63766 9.61868 9.60971 9.60073 9.59174 9.58275 9.57375	1.7148 - 5 1.7219 1.7290 1.7361 1.7432 1.7504 1.7577 1.7649 1.7722	1.17396 + 0 1.17879 1.18364 1.18851 1.19341 1.19834 1.20329 1.20329 1.20326 1.21327	5.8072 - 6 5.8010 5.7948 5.7825 5.7763 5.7763 5.7763 5.77639 5.7577	9.59390 - 1 9.58368 9.57346 9.56323 9.55300 9.54277 9.53253 9.53253 9.51205 9.50181
2590 2550 2800 2650 2700 2750 2800 2850 2950	2501 2551 2651 2651 2701 2751 2851 2851 2901 2951	730.559 330.362 330.164 329.946 329.768 329.570 329.372 329.174 328.777	1.7099 - 5 1.7083 1.7067 1.7050 1.7034 1.7018 1.7002 1.6976 1.6970	9.5557k - 1 9.58673 9.53677 9.52869 9.51966 9.51063 9.50159 9.49255, 9.48350 9.47445	1.7870 - 5 1.79% 1.8019 1.809% 1.8169 1.8245 1.8321 1.8328 1.8475 1.8552	1.22335 + 0 1.22844 1.23855 1.23868 1.24385 1.24904 1.25426 1.25951 1.26478 1.27009	5.7453 - 6 5.7391 5.7329 5.7264 5.7204 5.7182 5.7018 5.6956 5.6893	9.49156 - 1 9.48131 9.47105 9.46079 9.46079 9.40027 9.40027 9.40945 9.39917

TABLE III. - Continued

GEOMETRIC ALTITUDE, METRIC UNITS

_			1		METRIC ALTIT	,			
	Altit	ude 🚊	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal c	onductivity
7	Z, m 🗆	H, m	C _S ,	μ,	$\frac{\mu}{\mu_0}$	·η, m² sëc⁻¹	$\frac{\eta}{\eta_0}$	k, k-cal-m-l-sec-l(e/K)-l	<u>k</u> .k _o .
	1000 -950 -900 -850 -800 -750 -700 -650 -650	-1000 -950 -900 -850 -800 -750 -700 -650 -600	344.111 343.921 343.731 343.541 343.351 343.351 343.351 342.970 342.780 342.589 342.399	1.8206 - 5 1.8175 1.8175 1.8159 1.8159 1.8144 1.8128 1.8113 1.8097 1.8081	1.01744 + 0 1.01657 1.01570 1.01883 1.01396 1.01397 1.01222 1.01135 1.01048	1.3516 - 5 1.3568 1.3620 1.3673 1.3725 1.3779 1.3886 1.3986 1.3989	9.25273 - 1 9.28838 9.32420 9.36020 9.39637 9.43272 9.46925 9.50596 9.54285 9.57.992	6.1748 6 6.1687 6.1626 6.1506 6.1505 6.1848 6.1323 6.1323 6.1262 61201	1.020/1 + 0 1.019/1 1.018/1 1.018/1 1.016/1 1.016/1 1.015/1 1.013/0 1.013/0 1.013/0 1.013/0 1.013/0
	-500 -450 -450 -350 -300 -250 -200 -150 -150	-500 -450 -450 -350 -350 -250 -200 -150 -150	342.208 342.017 341.826 341.635 341.433 341.252 341.061 340.869 340.678 340.486	1.8050 - 5 1.8035 1.8019 1.8003 1.7988 1.7972 1.7956 1.7941 1.7925	1.00879 0 1.00787 1.00780 1.00612 1.00525 1.00438 1.00350 1.00263 1.00175	1.4048 - 5 1.4103 1.4158 1.4213 1.4268 1.4324 1.4380 1.4437 1.4493	9.73004 9.76803 9.80622 9.84459 9.88315 9.92190 9.76085	6.1140 - 6 6-1079 6-1018 6-0957 6-0896 6-0835 6-0774 6-07713 6-0652 6-0591	1.01007 + 0 1.00907 1.00806 1.00705 1.00508 1.00508 1.00403 1.00303 1.00202
	0 100 150 200 250 300 350 400	50 100 150 200 250 300 350 400 450	340.294 340.102 339.910 339.718 339.525 339.333 339.141 338.948 338.755 338.562	1.7894 - 5 1.7878 1.7862 1.7847 1.7815 1.7815 1.7800 1.7768 1.7768	1.00000 + 0 9.99124 - 1 9.98246 9.97369 9.96491 9.95612 9.94738 9.93858 9.92974 9.92974	1.4667 - 5 1.4722 1.4780 1.4839 1.4837 1.4897 1.4956 1.5015 1.5075	1.00000 + 0 1.00393 + 0 1.00789 1.01184 1.01585 1.01986 1.02390 1.02795 1.03202	6.0530 - 6 6.0469 6.0408 6.0347 6.0285 6.0164 6.0102 6.0041 5.9980	1.00000 + 0 9.98991 - 1 9.97982 9.96973 9.95963 9.94952 9.93942 9.93942 9.92931 9.91920 9.90909
	500 550 600 650 700 750 800 850 900 950	500 550 600 650 700 750 800 850 900 950	338.570 338.177 337.963 337.790 .337.597 337.403 337.210 337.016 336.822 336.629	1.7737 - 5 1.7721 1.7705 1.7689 1.7673 1.7658 1.7642 1.7642 1.7610	9.91213 - 1 9.90332 9.39450 9.88568 9.87685 9.86802 9.85919 9.85035 9.84150 9.83265	1.5195 - 5. 1.5255 1.5316 1.5377 1.5438 1.5500 1.5562 1.5624 1.5687	1.04023 + 0 1.04437 1.04852 1.05270 1.05690 1.06112 1.06536 1.06962 1.07390 1.073821	5.9919 - 6 5.9858 5.9796 5.9735 5.9612 5.9612 5.9551 5.9490 5.9428 5.9367	9.89897 - 1 9.88385 9.87833 9.86880 9.85847 9.83847 9.83820 9.82807 9.81792 9.80778
Ö	1000 1050 1100 1150 1200 1250 1300 1350 1400	1000 1050 1100 1150 1200 1250 1300 1350 1400	336.435 336.240 336.046 335.852 335.657 335.463 335.266 335.074 334.879	1.7579 - 5 1.7563 1.7547 1.7531 1.7515 1.7499 1.7483 1.7467 1.7451	9.82380 - 1 9.81494 9.80607 9.79720 9.78833 9.77945 9.77057 9.76168 9.75279 9.74389	1.5813 - 5 1.5876 1.5940 1.6004 1.6009 1.6134 1.6199 1.6264 1.6396	1.0825% + 0 1.08689 1.09126 1.09565 1.10007 1.10%51 1.10897 1.113%6 1.11796 1.122%9	5.9305 - 6 5.9244 5.9182 5.9121 5.9059 5.8998 5.8936 5.8875 5.8813 5.8752	9.79763 - 1 9.78748 9.77733 9.76717 9.75701 9.74685 9.73668 9.73668 9.72651 9.71634 9.70616
	1500 1550 1600 1650 1700 1750 1850 1850 1900	1500 1550 1600 1650 1700 1750 1799 1849 1849	334.489 334.293 334.098 333.707 333.511 333.316 335.120 332.924 332.728	1.7420 - 5 1.7404 1.7388 1.7372 1.7356 1.7350 1.7324 1.7308 1.7292	9.73499 - 1 9.72608 9.71717 9.70825 9.69933 9.69040 9.68147 9.67253 9.66359 9.65465	1.6463 - 5 1.6530 1.6597 1.6665 1.6733 1.6801 1.6869 1.6938 1.7008	1.12705 + 0 1.13163 1.13623 1.13623 1.14085 1.14550 1.15017 1.15959 1.16434 1.16911	5.8690 - 6 5.8567 5.8567 5.8505 5.8443 5.8382 5.8320 5.8258 5.8197 5.8135	9.69598 - 1 9.68580 9.67562 9.66583 9.65524 9.68504 9.63885 9.62865 9.61844 9.60424
	2000 2050 2100 2150 2200 2300 2300 2350 2400 2450	1999 2049 2099 2149 2149 2249 2349 2349 2349	332.532 332.335 332.139 331.746 331.746 331.549 331.352 331.155 330.958 330.761	1.7260 - 5 1.7244 1.7228 1.7228 1.7196 1.7180 1.7164 1.7147 1.7131	9.64570 - 1 9.63678 9.62778 9.61881 9.60908 9.59189 9.59189 9.58290 9.57391 9.56492	1.7147 - 5 1.7218 1.7289 1.7360 1.7431 1.7503 1.7575 1.7648 1.7721	1.17390 + 0 1.17872 1.18357 1.18344 1.19334 1.19826 1.20320 1.20818 1.21818	5.8073 - 6 5.8011 5.7949 5.7827 5.7826 5.7764 5.7702 5.77640 5.7578 5.7516	9.59403 - 1 9.58382 9.57360 9.56338 9.55316 9.55317 9.53270 9.53270 9.52247 9.51224 9.50200
	2500 2550 2400 2450 2750 2750 2750 2850 2850 2950	2599 2599 2599 2699 2779 2899 2899 2999	30.168 329.971 329.773 329.575 329.377 329.179 328.980 328.782	1.7099 - 5 1.7083 1.7067 1.7051 1.7035 1.7019 1.7002 1.6986 1.6970	9.55592 - 1 9.54692 9.53791 9.53889 9.51987 9.51085 9.50182 9.49278 9.48374 9.47470	1.7868 - 5. 1.7943 1.8017 1.8092 1.8167 1.8243 1.8319 1.8396 1.8473	1.22325 + 0 1.22633 1.23344 1.23857 1.24373 1.24862 1.25413 1.25937 1.26464 1.26994	5.7454 - 6 5.7392 5.7330 5.7268 5.7208 5.7145 5.7019 5.7019 5.6957 5.6895	9249176 - 1 92403152 9246127 9246102 9245077 9245077 9240972 9239946

TABLE III. - Continued
GEOPOTENTIAL ALTITUDE, METRIC UNITS

Altıt	ude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal c	onductivity
H, m ₂	z, m	C _S ,	μ,	$\frac{\mu}{\mu_0}$	η, m² sec-1	$\frac{\eta}{\eta_0}$	k, k-cal m ⁻¹ sec ⁻¹ (°K) ⁻¹	k ko
3000 3050 3100 3150 3200 3250 3350 3400 3450	3001 3051 3102 3152 3252 3252 3352 3402 3452	328.578 328.379 328.180 327.782 327.782 327.583 327.383 327.184 326.984 326.784	1.6937 - 5 1.6921 1.6905 1.6889 1.6872 1.6856 1.6840 1.6823 1.6807	9.46539 ÷ 1 9.45633 9.44726 9.43619 9.42931 9.42003 9.41094 9.40184 9.39274 9.38364	1.8630 - 5 1.8709 1.8787 1.8886 1.8986 1.9026 1.9187 1.9269 1.9350	1-27542 + 0 1-28078 1-28617 1-29158 1-29703 1-30801 1-31355 1-31911 1-32471	5.6831 - 6 5.6769 5.6707 5.6644 5.6582 5.6520 5.6457 5.6395 5.6395 5.6395	9-38889 - 1 9-37861 9-36832 9-35803 9-34773- 9-33744- 9-32714 9-31683 9-50652 9-29621
3500 3550 3600 3650 3700 3750 3800 3850 3950	3502 3552 3602 3652 3702 3752 3802 3852 3902 3952	326.584 326.384 326.184 325.984 325.784 325.583 325.382 325.182 324.981 324.780	1-6775 = 5 1-6752 1-6792 1-6726 1-6709 1-6693 1-6677 1-6660 1-6684 1-6627	9.37453 = 1 9.36582 9.35630 9.34717 9.33804 9.32890 9.31062 9.30186 9.29231	1.9432 - 5 1.9515 1.958 1.9682 1.9766 1.9850 1.9935 2.0020 2.0106 2.0192	1.33033 ± 0 1.33590 1.334167 1.34167 1.35314 1.35314 1.35891 1.36472 1.37057 1.37644 1.38235	5.6208 - 6 5.61%5 5.6083 5.6020 5.5958 5.5895 5.5833 5.5770 5.5708 5.5645	9.28590 - 1 9.27558 9.26526 9.25494 9.24461 9.23498 9.22394 9.21361 9.20327 9.19292
#000 #050 #150 #150 #200 #250 #350 #350 #400	4003 4103 4103 4153 4203 4253 4303 4353 4403 4453	324.579 324.377 324.176 323.974 323.773 323.571 323.369 323.167 322.965 322.763	1.6611 - 5 1.6595 1.65978 1.6562 1.6542 1.6529 1.6513 1.6480 1.6480	9.28315 - 1 9.27398 9.26481 9.25563 9.24644 9.23726 9.22806 9.21886 9.20966 9.20045	2:0279 - 5, 2:0366 2:0454 2:0552 2:0631, 2:0720 2:0809 2:0900 2:0990	1.38828 + 0 1.39425 1.40026 1.40629 1.41236 1.41847 1.42460 1.43077 1.43698 1.44321	5.5582 - 6 5.5520 5.55457 5.53394 5.5332 5.5269 5.5269 5.5143 5.5081 5.5018	9.18258 - 1 9.17223 9.16187 9.15151 9.15151 9.14115 9.13079 9.12042 9.11005 9.09968 9.08930
4500 4550 4600 4650 4700 4750 4850 4850 4900 4950	4503 4553 4603 4653 4703 4754 4804 4854 4954	322.560 322.358 322.155 321.952 321.749 321.546 321.343 321.140 320.937 320.733	1.6447 - 5 1.6430 1.6414 1.6397 1.6381 1.6364 1.6347 1.6331 1.63314	9-19123 - 1 9-18201 9-17278 9-16355 9-15352 9-15537 9-13583 9-12657 9-11731 9-10805	2.1173 = 5 2.1265 2.1358 2.1451 2.1545 2.1639 2.1733 2.1829 2.1925 2.2021	1-44749 + 0 1-45580 1-46214 1-46852 1-47493 1-48138 1-48736 1-49438 1-50094 1-50753	5.4955 - 6 5.4892 5.4829 75.4766 5.4703 5.4578 5.4515 5.4515 5.4515 5.45389	9.07892 - 1 9.06854 9.05815 9.04776 9.03737 9.02697 9.01657 9.00617 8.99576 8.98536
5000 5050 5100 5150 5200 5250 5350 5350 5450	5004 5054 5104 5154 5204 5254 5304 5355 5405	320.529 320.326 320.122 319.918 319.713 319.509 319.305 319.100 316.895 318.690	1.6281 - 5 1.6265 1.6248 1.6231 1.6215 1.6198 1.6181 1.6165 1.6148	9.09878 - 1 9.08951 9.08023 9.07094 9.06165 9.05235 9.04305 9.03374 9.02443 9.01511	2.2118 - 5 2.2215 2.2313 2.2412 2.2511 2.2610 2.2710 2.2811 2.2811 2.2912 2.3014	1.51416 + 0 1.52083 1.52754 1.53428 1.54106 1.54788 1.55474 1.556163 1.56857 1.57554	5.4326 - 6 5.4263 5.4199 5.4136 5.4073 5.4010 5.3947 5.3884 5.38821 5.3821	8.97494 - 1 8.96453 8.95411 8.94368 8.93326 6.92283 8.91240 8.90196 6.89152 8.8108
5500 5500 5600 5650 5700 5750 5800 5850 5900 5950	5505 5555 5605 5655 5705 5755 5805 5855 5905 5956	318.485 318.280 318.075 317.870 317.464 317.459 317.253 317.047 316.841 316.635	1.6115 - 5 1.6098 1.6095 1.6045 1.6043 1.6031 1.6014 1.5981 1.5981	9.00579 - 1 8.99646 8.98712 8.97778 8.96844 8.95908 8.94073 8.94036 8.93100 8.92162	2.3117 - 5 2.3220 2.3323 2.3428 2.3532 2.3638 2.3744 2.3850 2.3958 2.4065	1.58256 + 0 1.58961 1.59670 1.60384 1.61101 1.61823 1.62548 1.63278 1.64750	5.3694 - 6 5.3631 5.3564 5.3504 5.3441 5.3378 5.3314 5.3251 5.3188 5.3124	8.87063 - 1 8.86018 8.84973 8.83927 8.82881 8.81835 8.80789 8.77742 8.78694 8.77647
6000 6050 6150 6150 6200 6250 6350 6400 6450	6006 6056 6106 6156 6206 6256 6306 6356 6406 6457	316.428 316.222 316.015 315.809 315.602 315.395 315.188 314.980 314.773 314.565	1.5947 - 5 1.5931 1.5914 1.5897 1.58863 1.5846 1.5830 1.5833 1.58313	8.91224 - 1 8.90286 8.89347 8.58407 8.87467 8.86526 8.85585 8.84643 8.83700 8.82757	2.4174 - 5 2.4283 2.4303 2.4503 2.4614 2.4725 2.4838 2.4951 2.5064 2.5178	1.65%92 + 0 1.66239 1.66990 1.677%5 1.68505 1.69269 1.70037 1.70810 1.71588 1.72369	5.3061 - 6 5.2997 5.2934 5.2870 5.2877 5.2743 5.2680 5.2616 5.2553 5.2489	8.76599 - 1 8.75551 8.75552 8.73453 8.72404 8.71355 8.70305 8.69255 8.68204 8.67153
6500 6550 6600 6650 6700 6750 6850 6850 6900	6507 6557 6607 6457 6707 6757 6807 6857 6907	314.358 314.150 313.942 313.734 313.526 313.517 313.109 312.900 312.491 312.482	1.5779 - 5 1.5762 1.5765 1.5728 1.5711 1.5694 1.5677 1.5661 1.5644 1.5627	8.81814 - 1 8.80870 8.79925 8.78980 8.78034 8.77087 8.76140 8.75193 8.74245 8.74245	2.5293 - 5 2.5409 2.5542 2.5542 2.5759 2.5878 2.5997 2.6116 2.6237 2.6358	1.73156 + 0 1.73947 1.74742 1.75542 1.76347 1.77157 1.77971 1.78790 1.79614 1.80443	5.2425 - 6 5.2362 5.2298 5.2234 5.2171 5.2107 5.2043 5.1979 5.1976 5.1852	8.66102 - 1 8.65050 8.63999 8.62946 8.61894 8.60841 8.59788 8:58734 8.57680 8.56626

TABLE III. - Continued
GEOMETRIC ALTITUDE, METRIC UNITS

Altit	ude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermál co	onductivity
Z, m	H, m	C _S ,	μ,	$\frac{\mu}{\mu_0}$	η, m² sec-1	$\frac{\eta}{\eta_0}$	k, k-cal m ⁻¹ sec ⁻ (°K) ⁻¹	k ko
3000 3050 3100 3150 3200 3250 3350 3400 3450	2999 3049 3098 3148 3198 3248 3298 3348 3398 3448	328.583 328.385 328.186 327.987 327.788 327.589 327.390 327.191 326.792	1.6938 - 5 1.6921 1.6905 1.6889 1.6873 1.6857 1.6840 1.6824 1.6808	9.46565 - 1 9.45660 9.44754 9.43847 9.42940 9.42033 9.41125 9.40217 9.39308 9.38398	1.8628 - 5 1.8706 1.8785 1.8884 1.8943 1.9023 1.9104 1.9184 1.9266	1.27527 + 0 1.28062 1.28600 1.29141 1.29685 1.30232 1.30782 1.31335 1.31391 1.32450	5.6833 - 6 5.6771 5.6709 5.6646 5.6584 5.6522 5.6460 5.6397 5.6335 5.6273	9.389.18 - 1: 9.37891 9.36863 9.35835 9.34807 9.33778 9.32749 9.31719 9.30690 9.29660
3500 3550 3600 3650 3700 3750 3850 3850 3950	3498 3548 3598 3648 3648 3748 3748 3848 3848	326.592 326.392 326.172 325.792 325.792 325.592 325.391 325.391 324.790 324.790	1.6775 - 5 1.6759 1.6759 1.6743 1.6726 1.6710 1.6694 1.6677 1.6645 1.6628	9.37468 - 1 9.36578 9.35667 9.34755 9.33843 9.32931 9.32018 9.31104 9.30190 9.29276	1.5429 - 5. 1.9512 1.9555 1.9678 1.9742 1.9846 1.9931 2.0016 2.0102 2.0186	1.33011 + 0 1.33576 1.334144 1.34715 1.35289 1.35866 1.36446 1.37029 1.37616 1.38206	5.6210 - 6 5.6188 5.6085 5.6023 5.5961 5.5898 5.5773 5.57711 5.5648	9.28630 - 1 9.27599 9.26568 9.25537 9.24505 9.23473 9.22441 9.21409 9.20376 9.49343
4000 4050 4100 4150 4200 4250 4350 4350 4450	3997 4047 4097 4147 4197 4247 4247 4347 4397	324.589 324.300 324.187 323.985 323.784 323.582 323.381 323.179 322.977 322.775	1.6612 - 5 1.6579 1.6579 1.6563 1.6586 1.6580 1.6513 1.6897 1.6881	9.28361 - 1 9.27445 9.26529 9.25612 9.24695 9.23778 9.22840 9.21941 9.21022 9.20102	2.0275 - 5 2.0362 2.0049 2.0537 2.0626 2.0715 2.0894 2.0894 2.0985 2.1076	1.38798 + 0 1.39395 1.39994 1.40597 1.41203 1.41812 1.42424 1.43040 1.43640 1.44283	5.5586 - 6 5.5523 5.5840 5.5395 5.5335 5.5273 5.5210 5.5187 5.5084 5.5022	9.16310 - 1 9.17276 9.16242 9.15208 7.18173 9.13138 9.12103 9.11067 9.10031 9.08995
#500 #550 #600 #650 #700 #750 #850 #850 #960	4597 4597 4697 4697 4746 4786 4886 4946	322.573 322.371 322.169 321.966 321.764 321.561 321.358 321.155 320.952 320.749	1.6448 - 5 1.6431 1.6415 1.6398 1.6392 1.6365 1.6339 1.6332 1.63316 1.6299	9.19182 - 1 9.18261 9.17340 9.16418 9.15496 9.13455 9.13650 9.12726 9.11801 9.10876	2.1167 - 5 2.1259 2.1352 2.1445 2.1538 2.1632 2.1727 2.1822 2.1727 2.2013	1.44909 + 0 1.45538 1.46171 1.46808 1.47448 1.48092 1.48739 1.49390 1.50044	5.4939 - 6 5.4835 5.4771 5.4708 5.4645 5.4582 5.4519 5.4565 5.4593	9.07958 - 1 9.06922 9.05884 - 9.04847 9.03809 9.02771 9.01733 9.00694 8.99655 8.98616
SCOO 5050 5100 5150 5200 5250 5300 5350 5400 5450	4096 5096 5146 5146 5246 5296 5346 5395 5445	320.545 320.342 320.138 319.935 319.731 319.527 319.323 319.118 318.914 318.710	1.6282 - 5 1.8266 1.6283 1.6213 1.6216 1.6200 1.6183 1.6186 1.6150	9.09951 - 1 9.09025 9.08099 9.07171 9.04244 9.05316 9.04387 9.0458 9.02525 9.02529	2.2110 - 5 2.2207 2.2305 2.2403 2.2502 2.2602 2.2701 2.2802 2.2903 2.3005	1.51364 + 0 1.52030 1.52699 1.53372 1.54048 1.54729 1.55413 1.56101 1.56793 1.57489	5.4331 - 6 5.4268 5.4205 5.4142 5.4079 5.4016 5.3953 5.3690 5.3826 5.3763	8.97576 - 1 8.96536 8.95596 8.95595 8.93614 8.92373 8.91332 8.90290 8.69248 8.88205
5500 5550 5600 5650 5700 5750 5800 5850 5900 5950	5495 5545 5545 5645 5745 5745 5745 5845 5845	318.505 318.300 318.095 317.895 317.485 317.480 317.275 317.049 316.638	1.6116 - 5 1.6100 1.6083 1.6086 1.6050 1.6033 1.6016 1.6000 1.5983	9.00667 - 1 8.99736 8.98804 8.97872 8.96939 8.96906 8.95072 8.95072 8.93202 8.93202 8.93202	2.3107 - 5 2.3210 2.3313 2.3417 2.3522 2.3627 2.3733 2.3839 2.3846 2.4053	1.58189 # 0 1.58892 1.59600 1.60312 1.61028 1.61747 1.62471 1.63199 1.63931	5.3700 = 6 5.3637 5.3574 5.3574 5.3511- 5.3448 5.3384 5.3321 5.3258 5.3195 5.3131	8.87163 - 1 8.86119 8.85076 6.84032 8.84988 8.81944 8.80899 8.77854 8.78809
6000 6050 6100 6150 6200 6250 6350 6400 6450	5994 6094 6144 6144 6294 6284 6384 6384	316.452 316.246 316.039 315.833 315.627 315.420 315.213 315.007 314.800 314.593	1.5949 - 5 1.5933 1.5916 1.5809 1.5802 1.5805 1.5849 1.5832 1.5815 1.5798	8.91330 - 1 8.90394 8.89456 8.88519 8.87580 8.86642 8.85702 8.83762 8.83822 8.83881	2.4162 - 5 2.4270 2.4370 2.4490 2.4490 2.4712 2.4824 2.4936 2.5049 2.5163	1.65408 + 0 1.66153 1.66902 1.67655 1.68413 1.699175 1.69941 1.70712 1.71487	5.3060 - 6 5.3005 5.2941 5.2878 5.2815 5.2751 5.2688 5.2624 5.2561 5.2497	8.76718 - 1 8.75671 8.74625 8.73578 8.72531 8.71483 8.70436 8.69338 8.69339 8.67291
6500 6600 6650 6750 6750 6850 6850 6950	6443 6543 6643 6643 6743 6743 6843 6843	314.385 314.178 313.970 313.763 313.555 313.347 313.139 312.931 312.723 312.514	1.5781 - 5 1.5744 1.5748 1.5731 1.3714 1.5697 1.5680 1.5663 1.5646	8.81939 1 8.80997 0.80054 8.79111 8.78167 8.77223 8.76278 8.75233 8.74387 8.74387	2.5278 - 5 2.5393 2.5509 2.5626 2.5743 2.5861 2.5979 2.6099 2.6219 2.6339	1.73051 + 0 1.73640 1.74633 1.75431 1.76233 1.77040 1.77052 1.78669 1.79490 1.80316	5.2434 - 6 5.2370 5.2307 5.2243 5.2180 5.2116 5.2052 5.1989 5.1925 5.1862	8.66242 ~ 1 8.65192 8.64143 8.630942 8.60992 6.59941 8.58890 8.57838

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TABLE III.— Continued $$\frac{1}{\sqrt{2}}$$ GEOPOTENTIAL ALTITUDE, METRIC UNITS

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Áļţit	ude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal c	onductivity
H, m	Ž, m	C _S ,	μ_{s}	$\frac{\mu}{\mu_0}$	η, m² sec - 1	$\frac{\eta}{\eta_0}$	k, k-cal m ⁻¹ sec ⁻¹ (°K) ⁻¹	k: k _o .
7000 7050 7150 7150 7250 7250 7350 7400 7450	7208 7258 7308 7359 7409 7459	312.273 312.064 311.855 311.645 311.226 311.016 310.806 310.596 310.596	1.5610 - 5 1.5593 1.5576 1.5559 1.5552 1.5525 1.5507 1.5473 1.5473	8.72347 - 1 8.71397 8.70447 8.69495 8.68544 8.67592 8.6659 8.65886 8.64732 8.63777	2.6479 - 5 2.6602 2.6725 2.6849 2.6974 2.7099 2.7225 2.7352 2.7480 2.7608	1.81276 + 0 1.82715 1.82958 1.83806 1.85518 1.85518 1.86382 1.87250 1.88124 1.89003	5.1788 - 6 5.1724 5.1660 5.1596 5.1532 5.1405 5.1341 5.1277 5.1213	8,55572 - 1 8,54517 8,53462 8,52406 6,51350 8,50294 8,49238 8,48181 8,47124 8,46066
 7550 7600 7650 7700 7750 7800 7850 7900 7950	7509 7559 7609 7659 7709 7759 7810 7860 7910	310.175 309.765 309.754 309.332 309.332 309.121 308.909 308.698 308.486 308.274	1.5439 - 5 1.5422 1.5405 1.5388 1.5371 1.5354 1.5336 1.5319 1.53302 1.5285	8.62822 - 1 8.60910 8.59954 8.58996 8.58038 8.57080 8.56121 8.55161 8.55161	2.7737 - 5 2.7867 2.7998 2.8129 2.8262 2.8395 2.8529 2.8663 2.8799 2.8935	1.89887 + 0 1.90777 1.91672 1.92572 1.93477 1.94388 1.95305 1.96226 1.97154 1.98087	5.1149 - 6 5.1085 - 5.0956 5.0892 5.0828 5.0764 5.0700 5.0036 5.0571	8.45009 - 1 8.42992 8.42892 8.41833 6.40774 8.39715 8.38655 8.37595 6.36534 8.35474
8000 8050 8100 8150 8200 8250 8350 8400 8450	80.10 806G 8110 8160 6211 8261 8361 8361 8461	308.063 307.850 307.638 307.426 307.213 307.001 306.788 306.575 306.362 306.149	1.5268 - 5 1.5250 1.5233 1.5216 1.5199 1.5182 1.5164 1.5147 1.5130 1.51130	8.53240 - 1 8.52278 8.51316 8.50353 8.49390 8.48426 8.47462 8.47462 8.455531 8.4456	2.9072 - 5 2.9210 2.9349 2.9488 2.9629 2.9770 2.9912 3.0055 3.0199 3.0344	1.99026 + 0 1.99970 2.00920 2.01876 2.02837 2.03805 2.04778 2.05758 2.067143 2.07734	5.0379 5.0314 5.0250 5.0186 5.0121	8.34412 - 1 8.33351 8.32289 8.31227 8.30165 8.29102 8.28039 8.26976 8.25912 8.28848
8500 8550 8600 8750 8750 8750 8850 8850 8950	8511 8562 8612 8662 8712 8762 8812 8862 8912 8963	305.935 305.722 305.508 305.294 305.080 304.866 304.652 304.652 304.223 304.008	1.5095 - 5 1.5078 1.5043 1.5043 1.5024 1.5009 1.4991 1.4974 1.4975	8.43598 — 1 8.42630 8.41662 8.40693 8.39724 8.38754 8.37784 8.37784 8.35613 8.35841 8.35841	3.0490 - 5 3.0636 3.0784 3.0932 3.1081 3.1232 3.1383 3.1535 3.1688 3.1842	2.08731 + 0 2.09735 2.10744 2.11760 2.12782 2.13810 2.14845 2.15886 2.16933 2.17987	4.9864 - 6 4.9799 4.9735 4.9670 4.9606 4.9551 4.9477 4.9412 4.9348 4.9283	8.23783 - 1 8.22719 8.21654 8.20588 8.19523 8.18456 8.17390 8.16323 8.15256 8.14 189
9050 9050 9100 9150 9250 9250 9350 9450 9450	9013 9063 9113 9163 9213 9263 9314 9364 9414 9464	303.793 303.578 303.363 303.148 302.932 302.717 302.501 302.265 302.069 301.852	1.4922 - 5 1.4904 1.4387 1.4869 1.4852 1.4834 1.4817 1.4792 1.4764	8.33896 - 1 8.32922 8.31948 8.30974 8.29998 8.29092 8.28046 8.27069 8.26091 8.25112	3.1997 - 5 3.2153 3.2309 3.2467 3.2626 3.2786 3.3108 3.3271 3.3435	2.190h7 + 0 2.2011h 2.21188 2.22268 2.23355 2.244h9 2.255h9 2.25657 2.27771 2.28893	4,9218 - 6 4,9154 4,9089 4,9024 4,8960 4,8895 4,8830 4,8766 4,8761	8.13121 - 1 8.12053 8.10985 8.099916 8.08847 8.07778 8.06708 8.05638 8.04568 8.04568
9500 9550 9600 9650 9700 9750 9850 9850 9950	9514 9564 9615 9665 9715 9765 9865 9815 9915	301.636 301.419 301.203 300.986 300.769 300.551 300.334 300.117 299.899	1-4747 - 5 1-4729 1-4712 1-4694 1-4679 1-4679 1-4682 1-4684 1-4686	8.24133 - 1 8.23154 8.22173 8.22173 8.20211 8.19229 8.18246 8.17263 8.16279 8.15294	3.3600 - 5 3.3765 3.3732 3.4100 3.4269 3.4459 3.4611 3.4783 3.4956 3.5131	2.30021 + 0. 2.31156 2.32299 2.333Nn9 2.34606 2.35770 2.36942 2.38121 2.39308 2.40502	4.8571 - 6 4.8506 h.84h1 h.8377 4.8312 4.8247 h.8182 h.8117 4.8052 h.7987	8.02427 - 1 8.01355 8.00284 7.99212 7.98139 7.97067 7.95994 7.95994 7.93847 7.92773
10000 10050 10100 10150 10200 10250 10350 10350 10400 10450	10016 10066 10116 10166 10216 10216 10217 10317 10367 10417	299.463 299.245 299.027 298.808 298.590 298.371 298.152 297.713 297.713	1.4571 - 5 1.4535 1.4536 1.4536 1.4538 1.4500 1.4483 1.4465 1.4430 1.4430	8.14309 - 1 8.13323 8.12327 3.11350 8.10352 8.09374 8.08385 8.07395 8.06405 8.05414	3.5306 - 5 3.5483 3.5640 3.6020 3.6020 3.6201 3.6383 3.6567 3.6752 3.6938	2.41704 + 0 2.42914 2.45356 2.45356 2.46359 2.47629 2.47078 2.50335 2.513599 2.52672	4.7922 - 6 4.7857 4.7792 4.7727 4.7561 4.7596 4.7551 4.7466 4.7461 4.7336	7.91699 - 1 7.90624 7.89550 7.88474 7.87399 7.86323 7.85247 7.85247 7.852016
10500 10550 10600 10650 10700 10750 10850 10850 10900	10517 10548 10618 10668 10718 10765 10818 10869 10919	297.274 297.055 296.835 296.615 296.394 296.174 295.953 295.732 295.512 295.512	1-4394 - 5 1-4359 1-4359 1-4341 1-4325 1-4205 1-4270 1-4272 1-4234	8.04422 - 1 8.03430 8.02438 8.01444 6.0050 7.99455 7.9840 7.97464 7.96468 7.95470	3.7125 - 5 3.7313: 3.7503 3.7693 3.7885 3.8079 3.8273 3.8469 3.87666 3.8864	2.5% 153 + 0 2.55% 1 2.55% 1 2.580% 7 2.5936 1 2.60085 2.62016 2.63576 2.645766 2.6606%	h.7270 - 6 h.7205 h.7140 h.7075 h.7009 h.6994 h.6879 h.6813 h.6748 h.683	7.80939 - 1 7.79861 7.78783 7.77704 7.76626 (75546 7.74467 7.72387 7.72307 7.71227
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TABLE III — Continued

GEOMETRIC ALTITUDE, METRIC UNITS

Altit	fude	Sound speed	Coefficient	of viscosity	Kinematic	_o viscosity	Thermal c	onductivity
Z, m	H, m	C _{S.1}	μ, kg m ⁻¹ sec ⁻¹	$\frac{\mu}{\mu_0}$	η, m² sec⁻¹	$\frac{\eta}{\eta_0}$	k-cal m ⁻¹ sec ⁻¹ (*K) ⁻¹	k k _o
7000 7050 7100 7150 7200 7250 7300 7350 7400 7450	6992 7042 7092 7142 7192 7242 7292 7342 7391 7441	312.306 312.097 311.888 311.679 311.470 311.261 311.051 310.084 310.632 310.422	1-5612 - 5 1-5575 1-5578 1-5561 1-5561 1-5510 1-5510 1-5476 1-5459	8.72493 - 1 8.71545 8.70597 8.69648 8.68669 8.67749 8.66779 8.65788 8.64896 8.63944	2.6461 - 5 2.6583 2.6705 2.6829 2.6953 2.7078 2.7204 2.7330 2.7458 2.7586	1.81147 + 0 1.81983 1.82824 1.83670 1.84520 1.85376 1.86237 1.87102 1.87973 1.88849	5.1798 - 6 5.1734 5.1670 5.1607 5.1543 5.1479 5.1415 5.1352 5.1288 5.1224	8.55734 - 1 8.54682 8.53629 8.52576 8.51523 8.50469 8.49415 8.49360 8.47306 8.47306
7500 7550 7600 7650 7700 7750 7800 7850 7900	7491 7541 7591 7641 7691 7741 7790 7840 7890 7940	310.212 310.002 309.792 309.582 309.371 309.160 308.950 308.739 308.528 308.317	1.5442 - 5 1.5425 1.5408 1.5391 1.5374 1.5357 1.5380 1.5323 1.5305	8.62791 - 1 8.62038 8.61084 8.60130 8.59175 8.58219 8.572.53 8.56306 8.55339	2.7714 - 5 2.7844 2.7774 2.8105 2.8237 2.8369 2.8503 2.8637 2.8772 2.8772	1.89731 + 0 1.90617 1.91509 1.92406 1.93308 1.94216 1.95129 1.96048 1.96972 1.97901	5.1160 = 6. 5.1096 5.1032 5.0968 5.0904 5.0840 5.0776 5.0712 5.0648 5.0584	8.45196 - T 8.44140 8.43084 8.40971 8.39915 8.38858 8.37800 8.36742 8.35684
8000 8050 8100 8150 8200 8250 8350 8450 8450	7990 8040 8090 8140 8189 8289 8289 8339 8389 8439	308.105 307.89% 307.682 307.470 307.258 307.046 306.83% 306.63% 306.63%	1.5271 - 5 1.5254 1.5237 1.5220 1.5220 1.5185 1.5168 1.5151 1.5116	8.53433 - 1 8.52474 8.51514 8.50554 8.49593 8.48632 8.47670 8.45708 8.45745	2.9084 - 5 2.9182 2.9320 2.9459 2.9599 2.9740 2.9882 3.0024 3.0167 3.0312	1.98836 + 0 1.99777 2-00724 2-01676 2-02638 2-03598 2-04567 2-05542 2-06524 2-07511	5.0520 - 6 5.0456 5.0392 5.0328 5.0264 5.0200 5.0135 5.0071 5.0007 4.9943	8.34626 - 1 8.33567 8.32508 8.31449 6.30389 8.29329 8.29329 8.27209 8.27209 8.26148 8.25087
8500 8550 8450 8450 8700 8750 8850 8950	8%89 8539 8568 8638 8688 8738 8788 8838 8838 8838	305.984 305.771 305.558 305.385 305.131 304.718 304.704 304.276 304.276	1.5099 - 5 1.5082 1.5085 1.5087 1.5030 1.5013 1.4995 1.4978 1.4961	8.43817 1 8.42852 8.41887 8.40921 8.39955 8.38988 8.38020 8.37052 8.36003 8.35114	3.0457 - 5 3.0603 3.0749 3.0897 3.1046 3.1195 3.1346 3.1497 3.1450 3.1803	2.0850% + 0 2.0950% 2.10509 2.11520 2.12538 2.13562 2.14592 2.15629 2.16672 2.17721	4.9878 ~ 6 4.9814 4.9750 4.9686 4.9621 4.9557 4.9428 4.9364 4.9299	8.24025 - 1 8.22963 8.21901 8.20839 8.19776 8.18713 8.17650 8.16586 8.15522 8.14458
9000 9050 9100 9150 9200 9350 9350 9450	8987 9037 9087 9137 9187 9286 9336 9336 9436	303.848 303.634 303.419 303.204 302.789 302.775 302.559 302.344 302.129 301.913	1.4926 - 5 1.4909 1.4691 1.4874 1.4856 1.4839 1.4832 1.4804 1.4787 1.4769	8.34145 1: 8.33173 8.32202 8.31230 8.30258 8.29285 8.28311 8.27337 8.26362 8.25387	3.1957 - 5 3.2112 3.2268 3.2426 3.2584 3.2743 3.2793 3.3064 3.3226 3.3389	2.18777 + 0 2.19839 2.20908 2.21983 2.23065 2.24154 2.25250 2.26352 0.27461 2.26577	4.9235 6 4.9170 4.9106 4.9042 4.8977 4.8912 4.6848 4.6783 4.8719 4.8054	8.13393 - 1 8.12328 8.11263 8.10198 8.09132 8.08066 8.06999 8.05932 8.04865 8.03798
9500 9550 9650 9650 9700 9750 9850 9850 9850	9486 9536 9586 9635 9685 9785 9785 9885 9885	301.697 301.481 301.265 301.049 300.833 300.616 300.400 300.183 299.749	1.4752 - 5 1.4734 1.4717 1.4699 1.4682 1.4664 1.4647 1.4622 1.4612 1.4594	8.24411 - 1 8.23434 8.22457 8.21480 8.20501 8.19522 8.18543 8.17563 8.16582 8.15601	3.3553 - S 3.3718 3.3884 3.4051 3.4219 3.4389 3.4359 3.4559 3.4730 3.4903 3.5076	2.29700 + 0 2.30830 2.31967 2.33112 2.34263 2.35422 2.36588 2.37761 2.38942 2.40130	4.8590 6 4.8525 4.8460 4.8396 4.8331 4.8266 4.8201 4.8137 4.80072	8.02730 - 1 8.01662 8.00594 7.99525 7.98456 7.97387 7.96318 7.95248 7.94178 7.93107
10000 10050 10100 10150 10200 10250 10300 10350 10400 10450	9984 10034 10084 10134 10135 10233 10283 10333 10383 10383	299.532 299.314 299.097 298.879 298.661 298.443 298.255 298.006 297.788 297.569	1.4577 - 5 1.4559 1.4551 1.4524 1.4506 1.4489 1.4471 1.4473 1.4436 1.4436	8.14619 - 1 8.13636 8.12653 8.11669 8.10685 8.09790 8.0871h 8.07728 8.067%1 8.0575%	3.5251 - 5 3.5427 3.5604 3.5762 3.5961 3.6141 3.6322 3.6505 3.6689 3.6874	2.41326 + 0 2.42529 2.43740 2.44958 2.46185 2.47419 2.48661 2.49911 2.51169 2.52435	4.7942 - 6 4.7817 4.7813 4.7748 4.7683 4.7618 4.7553 4.7588 4.7423 4.7358	7.92037 - 1 7.90965 7.89894 7.88822 7.87750 7.86678 7.85605 7.84533 7.83459 7.82386
10500 10550 10600 10650 10700 10750 10800 10850 10950	10483 10583 10582 10632 10682 10732 10782 10782 10881 10931	297.350 297.131 296.912 296.693 296.474 296.254 295.034 295.814 295.594 295.374	1.4400 - 5 1.4383 1.4363 1.4367 1.4329 1.4329 1.4274 1.4258 1.4258	8.04766 - 1 8.03777 8.02788 8.01798 8.01798 8.00808 7.99817 7.98825 7.97633 7.96840 7.95546	3.7060 - 5 3.7247 3.7436 3.7625 3.7816 3.8008 3.8202 3.8396 3.8592 5.8790	2.53709 + 0 2.54991 2.56282 2.57580 2.58868 2.60203 2.61527 2.62860 2.64201 2.65551	4,7293 - 6 4,7228 4,7163 4,7098 4,7033 4,6968 4,6903 4,6838 4,6772 4,6772	7.81312 - 1 7.80238 7.79163 7.78089 7.7701h 7.75938 7.74863 7.73787 7.72710 7.71634

TABLE III. -- Continued

GEOPOTENTIAL ALTITUDE, METRIC UNITS

Alti	lude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal ca	onductivity
H,m	Z, m	C _S ,	μ, kg m ^{-l} sec-l	$\frac{\mu}{\mu_0}$	η̈́, m² sec=i	$\frac{\eta}{\eta_0}$	k,	k ko
11000 11100 11200 11300 11400 11500 11600 11700 11800 11900	11019 11119 11220 11320 11420 11521 11621 11722 11822 11922	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	3.906h - 5 3.9685 4.0316 4.0957 4.1608 4.2269 4.2241 4.3623 4.8316 4.5021	2-67+31 + 0 2-71681 2-75999 2-80386 2-84843 2-89370 2-93969 2-98641 3-03388 3-08210	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6517 4.6517	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
12000 12100 12200 12300 12400 12500 12600 12700 12800 12900	12023 12123 12223 12324 12424 12525 12625 12725 12826 12926	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	4.5736 - 5 4.7202 4.7952 4.8714 4.99488 5.0275 5.1074 5.1886 5.2710	3.13108 + 0 3.18083 3.23141 3.28276 3.33494 3.38795 3.44179 3.49650 3.55207 3.60853	4.6617 - 6 5.5617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.70146 1- 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
13000 13100 13200 13300 13400 13500 13600 13700 13800 13900	13027 13127 13227 13328 13428 13529 13629 13730 13830 13930	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	5.3548 - 5 5.4399 5.5164 5.6142 5.7035 5.77941 5.8862 5.97.98 6.0748 6.1713	3.66588 + 0 5.7241k 3.78333 3.84347 3.90455 3.96661 4.02966 4.09370 4.15877 4.22487	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
14000 14100 14200 14300 14500 14500 14500 14600 14700 14800 14900	14031 14131 14232 14332 14433 14533 14634 14734 14835 14835	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	6.2694 - 5 6.3691 6.47703 6.5731 6.6776 6.8916 7.0011 7.1124 7.2254	4.29202 + 0 4.36023 4.42953 4.49994 4.57146 4.64412 4.71793 4.77291 4.86909 4.94648	4.6617 ~ 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.701%6 - 1 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6
15000 15100 15200 15300 15400 15400 15600 15700 15800 15900	15035 15136 15236 15337 15437 15538 15638 15638 15639 15839	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	7.3403 - 5 7.4569 7.5754 7.6958 7.8182 7.9424 8.0687 8.1969 8.3272 8.4595	5.02510 + 0 5.10497 5.18611 5.26853 5.35227 5.43734 5.52376 5.61155 5.70074 5.79135	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.701%6 1 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6
16000 16100 16200 16300 16400 16500 16600 16700 16800	16050 16141 16241 16342 16442 16543 16643 16643 16744 16845	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	8.5940 - 5 8.7306 8.8693 9.0103 9.1535 9.2990 9.3468 9.5969 9.7495	5.98339 ← 0 5.97690 6.07190 6.168%1 6.266%5 6.3660% 6.46722 6.57001 6.67%%% 6.78052	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.701%6 - 1 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6
17000 17100 17200 17300 17400 17500 17600 17600 17600 17800 17900	17046 17146 17247 17347 17348 17548 17649 17749 17850 17951	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.0062 - 4 1.0222 1.0389 1.0717 1.0887 1.1060 1.1236 1.1415 1.1596	6.88829 + 0 6.99777 7.10899 7.22198 7.33676 7.45337 7.57184 7.69218 7.81444 7.93864	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.701%6 - 1 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6
18000 18100 18200 18300 18400 18500 18600 13700 18800 18900	18051 18152 18252 18353 18453 18555 18655 18655 18856 18956	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.1780 ~ 4 1.1968 1.2158 1.2351 1.2547 1.2747 1.2949 1.3155 1.3364	8.06482 + 0 8.19300 8.32321 8.45550 8.58989 8.72642 8.66512 9.00602 9.14916	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.701%6 - 1 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6

TABLE III. - Continued

GEOMETRIC ALTITUDE, METRIC UNITS

Altii	rude	Sound speed	Coefficient,	of viscosity	Kinematic	viscosity	Thermal conductivity		
Ź, m	H,m	C _S , m sac⁻¹	μ ,	$\frac{\mu}{\mu_0}$	η, m² sec-1	$-\frac{\eta}{\eta_0}$	k, k-calimilisecil(#K)**	k ko	
11000 11100 11200 11300 11400 11506 11600 11700 11800 11900	10981 11081 11180 11280 11380 11479 11579 11679 11778.	295.154 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4223 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94852 - 1. 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	3.8988 - 5 3.9564 4.0191 4.0827 4.1474 4.2131 4.2798 4.3475 4.1164 4.4863	2.66910 + 0 2.70854 2.75183 2.79501 2.83927 2.88824 2.92991 2.97631 3.02344 3.07131	4.6642 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.70557 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146	
12000 12100 12200 12300 12300 12500 12500 12600 12700 12800 12900	11977 12077 12177 12276 12376 12475 12575 12675 12675 12674	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	4.5574 - 5 4.4295 4.7028 4.7773 4.8529 4.9297 5.0078 5.0870 5.1676 5.2494	3.11998 ± 0 3.16934 3.21952 3.27049 3.32227 3.37486 3.42829 3.48256 5.53769 3.59369	\$.6617 - 6 \$.6617 \$.6617 \$.6617 \$.6617 \$.6617 \$.6617 \$.6617 \$.6617	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146	
13000 13100 13200 13300 13400 13500 13600 13700 13800	12973 13073 13173 13173 13272 13372 13471 13577 13671 13770 13870	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	5.3325 - 5 5.4169 5.5026 5.5897 5.6782 5.7680 5.8593 5.9520 6.0462 6.1419	3.65057 + 0: 3.70835: 3.76705: 3.82667: 3.88723: 3.94876: 4.01125: 4.07473: 4.13921: 4.2047:	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7-70146 - 1 7-70146 7-70146 7-70146 7-70146 7-70146 7-70146 7-70146 7-70146 7-70146	
14000 14100 14200 14300 14400 14500 14600 14600 14800 14900	13969 14069 14168 14268 14367 14467 14567 14566 14766 14865	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1. 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	6-2391 - 5 6-3378 6-4381 6-5400 6-6434 6-7485 6-8553 6-9638 7-0739 7-1858	4.27124 + 0 4.33883 5.40748 4.47722 4.54805 5.62001 4.69310 4.76735 4.84277 4.91937	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146	
15000 15100 15200 15300 15400 15500 15600 15700 15800 15900	14965 15064 15164 15263 15363 15462 15562 155661 15761 15860	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	7.2995 - 5 7.4150 7.5323 7.6514 7.7724 7.8953 8.0202 8.1471 8.2759 8.4068	%.99719 + .0 5.0762% 5.15653 5.23810 5.32095 5.40510 5.49059 5.577%2 5.66563 5.75523	4.6617 ~ 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.701%6 - 1 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6	
16000 16100 16200 16300 16500 16500 16600 16700 16800 16900	15960 16059 16159 16258 16358 16457 16557 16656 16756	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	8.5397 - 5 8.6748 8.8119 8.9513 9.0928 9.2366 9.3826 9.5309 9.6816 9.6347	5.84624 + 0 5.93869 6.03259 6.12798 6.22488 6.32330 6.42328 6.52463 6.62799 6.73277	4.6617 ~ 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146	
17000 17100 17200 17300 17500 17500 17600 17700 17800 17900	16955 17054 17154 17253 17352 17452 17551 17651 17750 17850	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.06670	9.9902 - 5 1.0148 - 6 1.0309 1.0471 1.0637 1.0805 1.0976 1.1149 1.1326 1.1505	6.83921 + 0 6.94732 7.05714 7.16870 7.28201 7.39711 7.51403 7.63279 7.75342 7.87596	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146	
18000 18100 18200 18300 18400 18500 18600 18700 18800	179:00 18049 18148 18247 18347 18446 18546 18645 18645	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1-1686 - 4 1-1871 1-2059 1-2249 1-2443 1-2639 1-2839 1-3042 1-3248 1-3457	8.00043 + 0 8.12686 6.25529 8.38574 8.51825 8.65285 8.78957 8.92845 9.06952 9.21281	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146	

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TABLE III. — Continued

GEOPOTENTIAL ALTITUDE., METRIC UNITS

Altitud	dé	Sound speed:	Coefficient	of viscosity	Kinematic	viscosity	Thermal conductivity		
H, m	Z, m	·C _{S1} m sec ⁻¹	μ, kg m ^{-r} sec ⁻¹	$\frac{\mu}{\mu_0}$	η, m² sec"	$\frac{\eta}{\eta_0}$	k, k-cal-m ⁻¹ sec ^{-1(o} K) ⁻ !	<u>k</u> ⊆ k _o	
19100 19200 19300 19400 19500 19600 19700	19158 19258 19359 19459 19560 19661 19761	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1-4216 - 5 1-4216 1-4216 1-4216 1-4216 1-4216 1-4216 1-4216 1-4216	7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.3793 - 4 1.4012 1.4234 1.4461 1.4691 1.4924 1.5161 1.5402 1.5647	9.44230 + 0 9.59237 9.74483 9.899.72 1.00571 + 1 1.02169 1.03493 1.05493 1.07118 1.08621	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146	
20100 20200 20300 20400 20500 20600 20700	20164 20264 20365 20466 20566 20667 20768	295.069 295.138 295.206 295.274 295.342 295.410 295.478 295.546 295.614 295.682	1.4216 - 5 1.4227 1.4227 1.4233 1.4238 1.4244 1.4249 1.4255 1.4260	7.94.4.72 - 1 7.94.780. 7.95.087 7.95.087 7.95.000 7.95.007 7.96.007 7.96.014 7.966.21 7.966.28 7.97.234	1.6148 = 4 1.6419 1.6494 1.6973 1.7257 1.7346 1.7839 1.8137 1.8440 1.8747	1,10551 + 1 1,12402 1,14285 1,16197 1,18141 1,20116 1,22124 1,24164 1,26237 1,28344	4.6617 - 6 4.6637 4.6657 4.6678 4.6678 4.6718 4.6738 4.6758 4.6778	7-70146 - 1 7-70879 7-70811 -7-71144 7-71476 7-71809 7-72141 7-72473 7-72806 7-73138	
21400 21500 21500 21600 21700	21271 21372 21472 21573 21674 21774 21875	295.750 295.818 295.885 295.953 296.021 296.089 296.157 296.225 296.293	1.4271 - 5 1.4277 1.4267 1.4287 1.4293 1.4298 1.4304 1.4309 1.4315 1.4320	7.97547 - 1 7.97847 7.98154 7.98460 7.98766 7.99073 7.99379 7.99685 7.99991 8.00297	1.9060 - 4 1.9378 1.97701 2.0029 2.0363 2.0702 2.1046 2.1396 2.1751 2.2113	1.30485 + 1 1.32661 1.34872 1.37118 1.39401 1.41721 1.44079 1.46475 1.48909 1.51383	4.6818 - 6 4.6839 4.6879 4.6879 4.6879 4.6919 4.6939 4.6979 4.6979	7.73470 - 1 7.73803 7.74135 7.74467 7.74499 7.75131 7.75463 7.75766 7.76460	
22100 22200 22300 22400 22500 22600 22700 22800	22177 22278 22379 22479 22580 22681 22781	296.428 296.496 296.564 296.632 296.699 296.767 296.835 296.902 296.970 297.038	1.4326 - 5. 1.4331 1.4332 1.4342 1.4348 1.4353 1.4359 1.4359 1.4370 1.4370	8.00603 - 1 8.00909 8.01215 8.01521 8.01626 8.02132 8.02438 8.02743 8.03354	2.2480 - 4 2.2853 2.3232 2.3617 2.4009 2.4407 2.4811 2.5221 2.5538 2.6062	1.53896 + 1 1.56450 1.59046 1.61683 1.64363 1.67085 1.67085 1.72663 1.75520 1.78422	4.7019 - 6 4.7040 4.7040 4.7080 4.7100 4.7120 4.7140 4.7180 5.7180	7.76792 - 1 7.77123 7.77755 7.77787 7.778119 7.78451 7.78183 7.79115 7.79146 7.79778	
23100 23200 23300 23400 23500 23600 23700 23800	23184 23285 23386 23486 23587 23688 23789 23889	297-105 297-173 297-241 297-308 297-376 297-443 297-511 297-578 297-646 297-713	1.4381 - 5 1.4386 1.4397 1.4402 1.4408 1.4413 1.4413 1.4413	8.03659 - 1 8.03965 8.04270 8.04575 8.04880 8.05185 8.05490 8.05795 8.06400	2.6493 - 4 2.6931 2.7376 2.7827 2.8286 2.8253 2.9227 2.9708 3.0197 3.9694	1.81371 + 1 1.84367 1.87411 1.90504 1.93647 1.96840 2.00085 2.03381 2.06730 2.10132	4.7220 - 6 4.7240 4.7240 4.7280 4.7301 4.7321 4.7341 4.7361 4.7381 4.7401	7.80110 - 1.7.8041 7.8041 7.80773 7.81.105 7.81436 7.81768 7.82099 7.82431 7.82762 7.83093	
24100 24200 24300 24400 24500 24600 24700 24800	24192 24292 24393 24494 24595 24696 24796 24897	297.781 297.848 297.916 297.983 298.051 298.118 298.186 298.253 298.320 298.388	1.4435 - 5 1.4441 1.4451 1.4457 1.4462 1.4468 1.4473 1.4484	8.06710 - 1 8.07014 8.07319 8.07624 8.07928 8.08233 8.08537 8.08841 8.09450	3.1199 - 4 3.1712 3.2234 3.2763 3.3301 3.3848 3.4403 3.4967 3.5541 3.6123	2.13589 + 1 2.17102 2.20670 2.24295 2.27979 2.31721 2.35522 2.39385 2.43308 2.47295	4.7421 - 6 4.7441 4.7461 4.7431 4.7501 4.7521 4.7541 4.7581 4.7581 4.7601	7.83425 - 1 7.83756 7.84087 7.84419 7.84750 7.85081 7.85412 7.85744 7.86075 7.86406	
25100 25200 25300 25400 25500 25600 25700 25800	25200 25300 25401 25502 25603 25704 25804 25905	298.455 298.522 298.590 298.657 298.724 298.791 298.859 298.926 298.93	1.4490 - 5 1.4495 1.4500 1.4506 1.4517 1.4517 1.4522 1.4528 1.4533 1.4533	8.09754 - 1 8.10056 8.10362 8.10666 8.10970 8.11274 8.11578 8.11881 8.12185	3.6714 - 4 3.7315 3.7926 3.95346 3.9176 3.9176 4.0467 4.1127 4.11798 4.2480	2.51344 + 1 2.55459 2.59638 2.63884 2.68198 2.72560 2.77031 2.81554 2.86148 2.90814	4.7621 - 6 4.7641 4.7661 4.7682 4.7702 4.7722 4.7742 4.7762 4.7782 4.7802	7.86737 - 1 7.87068 7.87339 7.87730 7.88061 7.88392 7.88723 7.89053 7.89384 7.89715	
26100 26200 26300 26400 26500 26600 26700 26800	26208 26308 26409 26510 26611 26712 26813 26913	299.127 299.195 299.262 299.329 299.396 299.63 299.530 299.597 299.664 299.731	1.4544 - 5 1.4549 1.4550 1.4560 1.4566 1.4577 1.4577 1.4587 1.4587	8.12792 - 1 8.13096 8.13399 8.13703 8.14006 8.14309 8.14612 8.14916 8.155219	4.3172 - 4 4.3876 4.8576 4.65316 4.6054 4.6803 4.7564 4.8336 4.9122	2.95555 + 1 3.00371 3.05263 3.10233 3.15281 3.20408 3.25617 3.30909 3.36283 3.41743	4.7822 - 6 4.7842 4.7862 4.7862 4.7902 4.7922 4.7942 4.7942 4.7962 4.7982 4.8002	7.90046 - 1 7.90376 7.90707 7.90707 7.91038 7.91368 7.91699 7.92030 7.92360 7.92691 7.93021	

TABLE III.—Continued

GEOMETRIC ALTITUDE, METRIC UNITS

Altit	ude	Sound speed	Coefficient	of viscosity	Kinémätic	viscosity	= Thermal co	onductivity
Ž, m	H, m	C _{S'1}	μ, kg m ⁻¹ sec ⁻¹	$\frac{\mu}{\mu_0}$	η, m² sec-1	$\frac{\eta}{\eta_0}$	k, k-cal m ⁻¹ sec ⁻¹ (°K) ⁻¹	k k _o
19000 19100 19200 19300 19400 19500 19600 19700 19800	18943 19043 19043 19142 19242 19341 19440 19540 19639 19739 19838	295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069 295.069	1.4216 - 5 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216 1.4216	7.94472 - 1. 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.3670 - 4. 1.3686 1.4105 1.425 1.4554 1.4554 1.5018 1.5255 1.5286 1.5741	9-35836 + 0 9-50620 9-65638 9-80893 9-96387 1-01213 + 1 1-02811 1-04435 1-07760	4.6617 - 6 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617 4.6617	7.70146 7.70146 7.70146 7.70146 7.70146 2.70146 7.70146 7.70146 7.70146
20000 20100 20200 20300 20400 20500 20600 20600 20900	19937 20037 20136 20235 20335 20434 20533 20633 20732 20632	295.069 295.094 295.162 295.230 295.297 295.365 295.432 295.500 295.568 295.635	1.4216 - 5 1.4218 1.4224 1.4229 1.4235 1.4240 1.4245 1.4256 1.4256	7.94472 - 1. 7.94585 7.94589 7.95195 7.95500 7.95805 7.96110 7.96415 7.96420 7.97024	1.5989 - 4 1.6247 1.6517 1.6772 1.7071 1.7355 1.7643 1.7936 1.8234 1.8536	1.09462 + 1. 1.11226 1.13077 1.14958 1.16869 1.18811 1.20784 1.22789 1.24827 1.26897	4.6617 - 6 4.6625 4.6665 4.6665 4.6705 4.6725 4.6775 4.6775	7.70146 = 7.70268 7.70268 7.70598 7.71259 7.71589 7.71920 7.7250 7.72580 7.72910
21000 21100 21200 21300 21400 21500 21500 21600 21800 21800	20931 21030 21130 21229 21328 21428 21527 21626 21725 21825	295.703 295.770 295.838 295.905 295.973 296.040 296.107 296.175 296.242 296.309	1.4267 - 5 1.4273 1.4278 1.4284 1.4284 1.4284 1.4294 1.4305 1.4311	7.97329 7.97633 7.97938 7.98242 7.98546 7.98851 7.99155 7.99459 7.99763 8.00067	1.8843 - 4. 1.9156 - 1.9773 - 1.9795 2.0123 - 2.00455 2.0793 - 2.1137 - 2.1186 2.1841	1.29001 + 1.31138 1.33310 1.35516 1.37758 1.4036 1.42351 1.44702 1.47091 1.49519	4.6804 - 6 4.6824 4.6864 4.6884 4.6904 4.6924 4.6944 4.6944	7.73241 - 7.73571 7.73501 7.74231 7.74561 7.74891 7.75250 7.75550 7.76210
22000 22100 22200 22300 22400 22500 22600 22700 22800 22900	21924 22023 22123 22222 22321 22421 22520 22619 22719 22818	296.377 296.444 296.511. 296.579 296.646 296.713 296.781 296.848 296.915 296.915	1.4322 - 5 1.4323 1.4338 1.4338 1.4343 1.4354 1.4354 1.4365 1.4371	8.00371 - 1 8.00675 8.00979 8.01282 8.01586 8.01889 8.02193 8.02496 8.02800	2.2201 - 4 2.2567 2.2939 2.3316 2.3700 2.4090 2.4487 2.4889 2.5298 2.5713	1.51985 + 1 1.54491 1.57037 1.57033 1.62251 1.64921 1.67633 1.70389 1.73188 1.76032	4.7004 - 6 4.7044 4.7044 4.7044 4.7084 4.7124 4.7144 4.7144	7.76540 - 7.76869 7.77199 7.77529 7.77858 7.78188 7.78847 7.77847 7.79505
3000 3100 3200 3300 3400 3500 3600 3700 3800	22917 23016 23116 23215 23314 23413 23513 23513 23612 23711 23610	297.049 297.116 297.18h 297.251 297.318 297.385 297.452 297.519 297.566 297.553	1. N376 5 1. N381 1. N382 1. N392 1. N398 1. NN05 1. NN 07 1. NN 11 1. NY	8.03406 - 1 8.03709 8.04315 8.04315 8.04921 8.03524 8.03527 8.05828	2.6135 - 4 2.6564 2.7000 2.7442 2.7892 2.7892 2.8813 2.9284 2.9763 3.0249	1.78922 + 1 1.61857 1.84839 1.87869 1.90947 1.94073 1.97249 2.00476 2.03754 2.07083	4.7204 - 6 4.7224 4.7243 4.7263 4.7263 4.7303 4.7323 4.7343 4.7343 4.7343	7.79835 - 7.80164 7.80493 7.80822 7.81152 7.81481 7.81810 7.82139 7.82468 7.82797
4000 4100 4200 4300 4400 4500 4600 4600 4700 4800	23910 24009 24108 24207 24307 24506 24505 24604 24704 24803	297.720 297.787 297.854 297.921 297.988 298.055 298.122 298.188 298.255 298.322	ch 56 ch 56 ch 56 ch 56 ch 57 ch	Dougle - 1 74737 8.07444 8.07444 8.08550 8.08550 8.08552	3.0743 - 4 3.1245 3.1755 3.2273 3.2799 3.3333 3.3876 3.4428 3.4988 3.5557	2:10466 + 1 2:13902 2:17392 2:20938 2:24540 2:31915 2:35690 2:35690 2:43420	4,7403 - 6 4.7423 4.7443 4.7463 4.7502 4.7502 4.7522 4.7562 4.7562 4.7562	7.83126 - 7.83454 7.83783 7.84112 7.84441 7.84770 7.85078 7.85427 7.85755 7.86084
25000 25100 25200 25300 25400 25500 25600 25700 25900	24902 25001 25100 25200 25200 25398 25397 25597 25696 25795	298.389 298.456 298.523 298.589 298.656 298.723 298.790 298.856 298.923 298.990	1. N484 - 5 1. N490 1. N495 1. N500 1. N506 1. N511 1. N517 1. N527 1. N527 1. N533	8.09456 - 1 8.09758 8.10059 8.40361 8.10663 8.10964 8.11266 8.11567 8.11868 8.12170	3.6135 - 4 3.6722 3.7318 3.7924 3.8539 3.9164 3.9799 4.0444 4.1098 4.1764	2.47377 + 1 2.51396 2.55479 2.554625 2.63837 2.688115 2.72461 2.76874 2.81358 2.85911	4.7602 - 6 4.7622 4.7641 4.7661 4.7761 4.7771 4.7771 4.7771 4.7761	7.86741 7.86741 7.87069 7.87398 7.87726 7.88054 7.88383 7.88711 7.89039 7.89367
26000 26100 26200 26300 26300 26500 26500 26500 26600	25894 25993 26092 26 92 26291 26390 26489 26588 26687 26787	299.056 299.123 299.190 299.256 299.323 299.389 299.456 299.589 299.589	1.4538 - 5 1.4544 1.4549 1.4554 1.4565 1.4565 1.4570 1.4576 1.4587	8.12471 - 1 8.12772 8.13073 8.13374 8.13675 8.13975 8.14276 8.14577 8.14678 8.15178	4.2439 - 4 4.3722 4.4530 4.5249 4.5721 4.7474 4.8239 4.9016	2.90536 + 1 2.95233 3.0000h 3.04850 3.09772 3.14771 3.19848 3.25004 3.30241 3.35560	4.7800 - 6 4.7820 4.7840 4.7860 4.7880 4.7900 4.7920 4.7939 4.7939 4.7979	7.89695 - 7.90023 7.90351 7.90679 7.91007 7.91007 7.91863 7.91963 7.91991 7.92319 7.92646

TABLE III. - Continued
GEOPOTENȚIAL ALTITUDE, METRIC UNITS

Altit	ude ,	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal conductivity		
H, m	, Z, m.	C _s ,	μ,	$\frac{\mu}{\mu_0}$	η ,	<u> 7</u>	k,	<u>k</u>	
11,-111	<u></u>	m·sec-1	kg m ⁻¹ sec ⁻¹	μ_{0}	- m² šė¢̃ ^ć r	$\overline{\eta_{o}}$	k-cal m-1 sec-1(%)-1	≥ ko	
7000	27115	299.798	1.4598 - 5	8.15825 - 1	5.0729 - 4	3.47289 + 1	4.8022 - 6	7.93352	
7100	27216	299.865	1.4604	8.16128	5.1552	3.52922	4.8042	7.93682	
7200	27317	299.932	1.4609	8.16430	5.2388	3.58644	4-9062	7.94012	
7300	27418	279.999 300.066	1.4614	8.16733 8.17036	5.3237 5.4099	3.64456 3.70359	4.8082 4.8102	7.94343 7.94573	
7400 7500	27519 27620	300.133	1.4625	8.17339	5.4975	3.76356	4.8122	7.95003	
7600	27720	300-200	1.4625 1.4631 1.4636 1.4642	8-17641 8-17944	5-5865	3.82446	4.8142	7. 95334	
7700	27821	300.267	1.4636	8.17944 8.18246	5.6768 5.7686	3.88633 3.94917	4.8162 4.8182	7.95664 7.95994	
7800 7900	27922 28023	300.334 300.401	1.4647	8.18549	5.8619	4.01299	4.8202	7.96324	
8000 8100	28124 28225	300.468 300.535	1.4652 - 5 1.4658	8.18851 - 1 8.19153	5.9566 - 4	4.07782 + 1 4.14367	4.8222 - 6 4.8242	7.96654 - 7.96984	
8200	28326	300.602	1:4663	8.19456	6.0527 6.1504	4.21054	4.8252	7:497314	
8300	28326 28427	300.668	1.4669	8.19758 8.20060	6.2496	4.27847	4.8282	7.97644	
8400 8500	26527 28628	300.735	1.4674 1.4679	8.20060 8.20362	6.3504	4.34746 4.41753	4.8302 4.8322	7.97974 7.98304	
8400	28729	300.869	1.4685	8.20664	6.5567	4.48870	4.8342	7.9863k	
8700	28830	300.936	1.4690	8.20966	6.6623	4.56099	4.8362	7.98964	
8800 8900	26731 29032	301.002 301.069	1.4696	8-21268 8-21570	6.97696	4-63440 4-70897	4.8382 4.8401	7.99294 7.99624	
2000.	29133	1	1.4706 - 5	8.21872 - 3	6.9891 - 4	4.78469 + 1	4.8421 - 6	7.99954 -	
9100	29234 29335	301.136 301.203 301.269	1.4712	8.22173 8.22475	7.1014 7.2155	4.86161 4.93972	4.8441 4.8461	8.00284 8.00613	
9200	29335 29436	301.269_	1-47-17-	8-224/5	7.2155	5.01905	4.8481	8.00943	
9300	29537	301.336 201.403	1.4723 1.4728 1.4733	8.22777 8.23078 8.23380	7.3314 7.4491	5.09962	4.8501	8.01273	
9500	29638	301.469	1.4733	8.23380	7.5686	5.18145	4.8521	8.01603 8.01932	
9600 9700	29738 29839	301.536 301.603	1.4739	8.23681 8.23983	7.6900 7.8133	5.26455 5.34895	4.8541 4.8561	8.02262	
9800. 9900	29940 30041	301.669	1.4744 1.4750 1.4755	8.24284 8.24585	7.9385 8.0657	5.43466 5.52170	4.8581 4.8601	8.02591	
0000	-	301.802	1,4760 - 5	8.24886 - 1	8.1948 - 4	5.61011 + 1	4.8621 - 6	8.03250 -	
0100	30142 30243	301.869	1.47.66	8.25188	8.3259	5.69988	4.8541	8.03580	
0200	30344	301.936	1.4771	8.25489	8.4591	5.79106	4.8661	8.03909	
0300	30445 30546 30647	302.002 302.069	1.4777	8.25790 8.26091	8.5944 8.7317	5.88364 5.97767	4.8681	8.04239 8.04568	
0500	30647	302.135	1.4787	8.26592	8.8712	6.07316	4.8721	8.04897	
0000	30748	302.135 302.202	1.4793	8.26693	9.0128	6.17013	4.8741	8.05227	
10700 10800	30849 30950	302.268 302.335	1.4798	8.26993 8.27294	9.1567	6.26860	4.8761	8.05556 8.05885	
10900	31051	302.401	1.4809	8.27595	9.3027 9.4511	6.36861 6.47015	4.8800	8.06215	
1000	31152	302.467	1.4814 5	8.27895 ² 1 8.28196	9.6017 - 4 9.7547	6.57328 + 1 6.67800	4.8820 - 6 4.8840	8.06544 - 8.06873	
11100 11200	31253 31354	302.534 302.600	1.4820	8.28496	9.9100	6.78434	4.8860	8.07202	
1300	31455	302.667	1.4830	8-28797	1.0068 - 3	6.89233	4.8880	8.07531	
1400	31556	302.733 302.799	1.4836	8.29097 8.29398	1.0228	7.00199 7.11334	4.8900 4.8920	8.07860 8.08189	
1500 1600	31657 31758	302.866	1.4846	8.29698	1.0556	7.22642	4.8940	8.08518	
1700	31859	302.932 302.998	1.4852	8.29998	1.0723	7.34123	4.8960	8.08847	
1800	31960 32061	302.998 303.065	1.4857 1.4863	8.30298 8.30598	1.0894	7.45783 7.57622	4.8980 4.9000	8.07175 8.09505	
2000	32162	303.131	.1.4868 5	8.36899 - 1	1.1242 - 3	7.69644 + 1	4.9020 - 6	8.09834	
2200	32364	303.502	1.4898	8.32578	1.1635	7.96509	4.9131 4.9242	8-11675 8-13516	
2400 2600	32566 32768	303.873	1.4928	8.34255 8.35931	1.2040	8.24243 8.52869	4.9354	8.15355	
2800	32970	304.612	1.4988	8.37605	1.2890	8.82416	4.9465	8.17193	
2800 3000 3200 3400	33172	304.981 305.350	1.5018	8.39277	1.3335	9.12910 9.44379	4.9576 4.9687	8.19031 8.20867	
3200	33374 33576	305.350	1.5048	8.40947 8.42615	1.3795	9.76851	1.9798	8.22702	
3400 3800	33779 33981	306.086 306.454	1.5107	8.44282 8.45947	1.4758	1.01036 + 2	4.9909 5.0020	8.24537 8.26370	
4000	34183	306.821	1.5167 - 5	8.47610 - 1	1.5784 - 3	1.08059 + 2	5.0131 - 6	8.28203 -	
14200	34385	307.187	1.5197	8-49271	1.6322	1.41738	5.0242	8.30034	
4400	34587	307.553	1.5226	8.50931	1.6876	1.15533	5.0353 5.0464	8.31864 8.3694	
4600 4800	34789 34992	307.919	1.5256 1.5286	8.52589 8.54245	1.8038	1.23484	5.0574	8.35523	
5000	35194	308.649	1.5315	8.55899	1-8646	1-27647	5.0685	8.37350	
5200	35396	309.013	1.5345	8.57552	1.9273	1.31940	5.0796	8.39177 8.41002	
5400 5600	35598 35801	309.377	1.5374	8.59202 8.60852	2.0586	1-40930	5.1017	8.42827	
5800	36003	310.104	1.0433	8-62499	2.1273	1.45636	5.1127	8.49651	
6000	36205 36407	310-466 310-829	1.5463 - 5 1.5492	8.64145 - 1 8.65788	2.1982 - 3 2.2712	1.50486 + 2 1.55486	5.1237 - 6 5.1348	8.46473 - 8.48295	
16400	36610	31.1.191	1.5522	8.67431	2.3465	1.60640	5.1458	8.50116	
6600	36812	311.552	1.5551	8.69071	2.4241 2.5041	1.65952	5.1568 5.1678	8.51935 8.53754	
0007E	37014 37217	311.913	1.5580	8.70710 8.72347	2.5865	1.77068	5.1788	8.55572	
37200	37419	312.634	1.5639	8.73982	2.6714	1.82882	5.1898	8.57389	
7400	37621	312.993	1.5668	8.75616	2.7589	1.88872	5.2008 5.2118	8.61019	
7600 7800	37824 38026	313.353	1.5697	8.77248 8.78878	2.8490	2.01402	5.2228	8.62833	
		,	,	1	1	i	1 '		

TABLE III. - Continued
GEOMETRIC ALTITUDE, METRIC UNITS

Altit	ude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal c	onductivity
Z, m .	H, m	C _S , ○ m sec ⁻¹	<i>ļ⊥_š</i> kg⊪m⁻isec⁻i	$\frac{\mu}{\mu_0}$	η, m² sec-	$\frac{\eta}{\eta_0}$	k-cal m ⁻¹ sec ⁻⁽ (°K) ⁻¹	<u>k</u>
27000 27100 27200 27300 27400 27500 27600 27600 27800 27900	26886 26985 27084 27183 27282 27382 27382 27580 27679 27778	299.722 299.788 299.855 299.921 299.988 300.054 300.120 300.187 300.253 300.319	1.4592 - 5: 1.4597 1.4508 1.4608 1.4614 1.4619 -1.4624 1.4635 1.4635	8.15479 - 1 8.15779 8.16079 8.16380 8.16680 8.16980 8.17280 8.17580 8.17580 8.18180	4.9805 - 4 5.0606 5.1820 5.2287 5.3086 5.3939 5.4805 5.5684 5.6577 5.7484	3.40962 + 1 3.46448 3.52020 3.57678 3.63426 3.69262 3.75189 3.81207 3.87322 3.93530	4.7999 - 6 4.8019 4.8058 4.8078 4.8078 4.8118 4.8138 4.8158 4.8177	7.92974 - 1 7.93302 7.93529 7.93957 7.94284 7.94612 7.94632 7.95267 7.95267 7.95594
28000 28100 28200 28300 28400 28500 28600 28700 28800 28900	27877 27976 28075 28175 28175 28274 28373 28472 28571 28670 28769	300.386 300.452 300.518 300.585 300.651 300.717 300.783 300.850 300.916	1-46% - 5 1-4651 1-4656 1-4662 1-4667 1-4673 1-4683 1-4689 1-4689	8.18480 - 1 8.18780 8.19079 8.19379 8.19379 8.19678 8.20277 8.20577 8.20576 8.21175	5.8405 - ¥ 5.9340 6.0290 6.1254 6.2234 6.3228 0.4238 6.5264 6.6306 6.7363	3.99835 + 1 4.06238 4.12740 4.19343 4.26048 4.32857 4.39772 4.46794 4.53925 4.61166	4.8197 - 6 4.8217 4.8237 4.8257 4.8276 4.8296 4.8316 4.8356 4.8356	7.96249 - 1 7.96576 7.96903 7.97230 7.97558 7.97885 7.98212 7.98339 7.98866 7.99193
29000 29100 29200 29300 29400 29500 29600 29700 29800 29900	28868 28967 29066 29166 29265 29364 29463 29562 29661 29760	301.048 301.114 301.180 301.246 301.312 301.379 301.445 301.511 301.577 301.643	1.4699 - 5 1.4705 1.4710 1.4715 1.4721 1.4726 1.4731 1.4737 1.4742	8.21474 - 1 8.21773 6.22072 8.22371 8.22570 8.22969 0.23268 8.23566 6.23865 8.24163	6.8438 - 4 6.9528 7.0636 7.1760 7.2902 7.4062 7.5240 7.6435 7.7649 7.8882	4.68519 + 1 4.75986 4.83568 4.91267 4.99085 5.07024 5.15085 5.23271 5.31582 5.40022	4.8395 - 6 4.8454 4.8454 4.8454 4.8474 4.8516 4.8538 4.8553 4.8573	7.99519 - 1. 7.99846 6.00173 8.00500 8.00827 8.01153 8.01480 8.01806 8.02133 8.02460
30000 30100 30200 30300 30400 30500 30500 30700 30600 30900	29859 29958 30057 30156 30255 30355 30453 30453 30552 30651 30751	301.709 301.775 301.841 301.906 301.972 302.036 302.104 302.170 302.236 302.302	1.4753 - 5 1.4758 1.4763 1.4769 1.4769 1.4779 1.4785 1.4795 1.4795	8.24462 - 1 8.24760 8.25059 8.25357 8.25655 8.25953 8.26251 8.26549 8.26847 8.27145	8.0134 - 4 8.1405 8.2495 8.4006 8.5336 8.6867 8.8059 8.9452 9.0866 9.2302	5.48591 + 1 5.57293 5.66128 5.75099 5.84208 5.93456 6.02847 6.12381 6.22062 6.31892	4.8593 - 6 4.8613 4.8632 4.6652 4.6672 4.8672 4.8711 4.8731 4.8751 4.8771	8.02786 - 1 8.03172 8.03559 8.035565 8.04091 8.04744 8.04744 8.0570 6.05722
31000 31100 31200 31300 31400 31500 31600 31700 31800 31900	30850 30949 31048 31147 31246 31345 31345 31543 31543 31642 31741	302.368 302.433 302.499 302.565 302.631 302.696 302.762 302.828 302.893 302.959	1.4806 5 1.4811 1.4817 1.4822 1.4822 1.4833 3.4838 1.4849 1.4849	8.27443 - 1 8.27741 8.28038 8.28336 8.28336 8.28634 8.28931 8.29229 8.29229 8.29526 8.29623 8.30120	9.3759 - 4 9.5240 9.6742 9.8268 9.9817 1.0139 - 3 1.0299 1.0461 1.0625 1.0792	6.41872 + 1 6.52004 6.62292 6.72738 6.83342 6.94109 7.05041 7.16139 7.27407 7.38847	4.8790 - 6 4.8830 4.8850 4.8850 4.8869 4.8889 4.8909 4.6928 4.6948	8.06048 - 1 8.06375 8.06701 8.07026 8.07352 8.07678 8.08004 8.08330 8.08556 8.08981
32000 32200 32400 32600 32600 33000 33200 33400 33800	31840 32038 32236 32434 32632 32830 33027 33225 33423 33621	303.025 303.201 303.568 303.935 304.301 304.667 305.032 305.397 305.761 306.125	1.4859 - 5 1.4874 1.4903 1.4903 1.4903 1.4902 1.5022 1.5052 1.5081 1.5111	8.30418 - 1 8.31215 8.32877 8.34537 8.36195 8.37852 8.39506 8.41159 8.42810 8.44459	1.0962 - 3 1.1315 1.1706 1.2109 1.2525 1.2955 1.3397 1.3858 1.4811	7.50461 + 1. 7.74642 8.01392 8.28995 8.57476 8.86861 9.17176 9.8847 9.80703 1.01397 + 2	4.8988 - 6 4.9041 4.9151 4.9371 4.9371 4.9391 4.9591 4.9591 4.9921	8.09307 - 1 8.10181 8.12004 8.13825 8.15645 8.17465 8.17465 8.21100 8.22916 8.24731
34000 34200 34400 34600 35000 35200 35200 35600 35600	33819 34017 34215 34413 34610 34808 35006 35204 35402 35599	306.489 306.852 307.214 307.577 307.938 308.299 308.660 309.021 309.380 309.740	1.5140 - 5 1.5169 1.5199 1.5228 1.5228 1.5287 1.5316 1.5345 1.5375	8.46106 - 1 8.47751 8.49394 8.51036 8.52676 8.54314 8.55950 8.57584 8.57217 8.60847	1.5312 - 3 1.5329 1.6332 1.0912 1.7478 1.8062 1.8665 1.9285 1.9285	1.04628 + 2 1.08367 1.12015 1.15777 1.19656 1.23654 1.27776 1.32025 1.36405 1.40918	5.0031 - 6 5.0141 5.0250 5.0360 5.0470 5.0579 5.0688 5.0798 5.0798 5.0707	8.26545 - 1 8.28358 8.30170 8.31980 8.33790 8.35599 8.37476 8.39213 8.41018 8.42822
36000 36200 36400 36600 36800 37000 37200 37400 37600	35797 35995 36193 36390 36588 36786 36984 37181 37379 37577	310.099 310.457 310.816 311.531 311.531 311.887 312.244 312.600 312.955 313.310	1.5433 - 5 1.5462 1.5491 1:5520 1.5549 1.5578 1.5607 1.5635 1.5665	8.62476 - 1 8.64103 8.65729 8.677352 8.677352 8.70594 8.702212 8.73829 8.75443 8.77056	2.1264 - 3 2.1964 2.2685 2.3429 2.4194 2.4983 2.5796 2.6633 2.77495 2.6383	1.45570 + 2 1.50363 1.55302 1.65303 1.65633 1.71034 1.76598 1.62328 1.88231 1.94309	5.1125 - 6 5.1235 5.1344 5.1452 5.1561 5.1670 5.1779 5.1888 5.1996 5.2105	8.44625 - 1 8.46428 8.48229 8.50029 8.51628 6.53625 6.53625 6.57218 6.57218 6.59013 6.60806

TABLE III. — Continued

GEOPOTENTIAL ALTITUDE, METRIC UNITS

	Altitud	dę	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal o	conductivity
38200 3841 11.482 1.5861 0.22135 3.1261 2.1466 5.2477 0.6250 3.2277 0.6250 3.2	H, m	.Z, m			$\frac{\mu}{\mu_0}$		$\frac{\eta}{\eta_0}$	1	k k _o
*** **********************************	38200 38400 38600 38800 39200 39200 39400 39600	38431 38633 38836 39038 39241 39443 39646	514.428 314.706 315.143 315.500 315.856 316.212 316.565	1.5705 1.5514 1.5843 1.5872 1.5801 1.5959 1.5959	8.82133 8.83758 8.85382 8.87004 8.88624 8.90242 8.91859 8.93474	3.1361 3.2577 3.3422 3.4499 3.5608 3.6750 3.7926 3.9136	2.14699 2.21648 2.28806 2.36178 2.43769 2.51587 2.59636 2.67924	5.24%7 5.2557 5.2666 5.2776 5.2885 5.2994 5.3104 5.3213	8.68269 8.70079 8.71887 8.73695 8.75502 8.77308 8.79113
## ## ## ## ## ## ## ## ## ## ## ## ##	#0200 #0#00 #0600 #0800 #1000 #1200 #1400 #1600	40456 40658 40861 41064 41266 41469 41471 41671	317.707 318.340 318.474 319.044 319.369 319.751 320.103	1.6074 1.6103 1.6132 1.6160 1.6187 1.6218 1.6246	8.98310 8.79919 9.01525 9.03131 9.04734 9.06336 9.07937 9.07937	4.2986 4.4346 4.5745 4.7186 4.8668 5.0193 5.1762 5.3377	2.94282 3.03590 3.13170 3.23029 3.33176 3.43618 3.54363 3.65418	5.3540 5.3649 5.3758 5.3667 5.4976 5.4085 5.4194 5.4302	8.86324 8.86124 8.89923 8.91721 8.93518 8.95314 8.97110
NAZOO	42200 42400 42600 42800 43000 43200 43400 43600	42482 42685 42887 43090 43293 45496 43498	321.504 321.854 322.205 322.554 322.903 323.251 323.599 323.944	1.6361 1.6416 1.6416 1.6475 1.6503 1.6560	9.14322 9.15915 9.17506 9.179095 9.20682 9.22268 9.223853 9.23853	5.8507 6.0316 6.2177 6.4090 6.6059 6.8083 7.0165 7.2305	4.00534 4.12918 4.25657 4.38759 4.52234 4.66093 4.80344 4.94999	5.4628 5.4736 5.4845 5.4953 5.5061 5.5170 5.5278 5.5386	9.04281 9.06071 9.07860 9.09649 9.11436 9.13223 9.15008
A6400	**200 ***400 ***800 *5200 *5200 *55600	44510 44712 44915 45118 45321 45524 45727 45930	324.787 325.333 325.479 324.024 324.369 324.714 327.402	1.6644 1.6673 1.6729 1.6729 1.6725 1.6785 1.6841	9.30175 9.31751 9.33326 9.38900 9.36471 9.38042 9.39611 9.41178	7.9096 8.1488 8.3947 6.6475 8.9073 9.1743 9.4487 9.7307	5.41488 5.57863 5.74697 5.92000 6.09786 6.28066 6.46854 6.66161	5-5710 5-5817 5-5925 5-6033 5-6141 5-6248 5-6356 5-6463	9.22140 9.23921 9.25700 9.27479 9.29256 9.31033 9.32809
#8800 #871 \$29,799 1,7037 9.52105 1.3886 9.50651 5.7214 9.45211 9.8600 48717 329,799 1,7037 9.52105 1.4605 9.99882 5.7214 9.45211 9.45	46200 46400 46600 47000 47200 47200 47400	46538 46741 46744 47147 47350 47553 47756 47959	328.431 328.773 329.114 329.457 329.799 329.799 329.799	1.6725 1.6953 1.6981 1.7009 1.7037 1.7037 1.7037	9.45870 9.47831 9.48991 9.50549 9.52105 9.52105 9.52105	1.0624 1.0939 1.1262 1.1594 1.1935 1.2240 1.2553 1.2873	7.27338 7.46862 7.70975 7.93692 8.17029 8.37918 8.59340 8.81311	5-6785 5-6893 5-7000 5-7107 5-7214 5-7214 5-7214	9.39902 9.41672 9.43442 9.45211 9.45211 9.45211
\$5000 \$5004 \$329.799 1.7037 9.52105 1.8564 1.27088 5.7214 9.45211 \$1500 \$1413 329.799 1.7037 9.52105 1.9773 1.35368 5.7214 9.45211 \$1500 \$1921 \$220.799 1.7037 9.52105 2.1062 1.44187 5.7214 9.45211 \$2000 \$2429 \$2200 \$2429 \$17037 9.52105 2.1062 1.44187 5.7214 9.45211 \$25000 \$2429 \$2200 \$2429 \$1000 \$2429 \$1000 \$2429 \$1000 \$2429 \$1000 \$2429 \$1000 \$2429 \$10000 \$1000 \$1000 \$1000 \$1000 \$1000 \$1000 \$10000 \$10000 \$10000 \$1000 \$1000 \$1000 \$10000 \$10000 \$10	48200 48400 48600 48600 49000 49200 49200 49400 49600	48568 48771 48774 49178 49381 49584 49787	329.799 329.799 329.799 329.799 329.799 329.799	1.7037 1.7037 1.7037 1.7037 1.7037 1.7037 1.7037	9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105	1.3886 1.4241 1.4605 1.4979 1.5362 1.5755 1.6157	9.50651 9.74956 9.99882 1.02545 + 3 1.05166 1.07855 1.10613 1.13441	5.7214 5.7214 5.7214 5.7214 5.7214 5.7214 5.7214	9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211
55500 55989 325,504 1,4687 9.32539 3.3489 2.29261 5.5877 9.23030 56000 56498 324,888 1.6436 9.29724 3.5492 2.42973 5.5679 9.319849 56500 57007 324,269 1.6586 9.26904 3.7622 2.57561 5.5486 9.16456 5.57000 5.7516 323,649 1.6535 9.24079 3.9890 2.73085 5.5293 9.13478	50500 51000 51500 52000 52000 53000 53500 54000	50904 51413 51921 52429 52937 53446 53954 54463	329.799 329.799 329.799 329.799 329.189 328.578 327.946 327.353	1,7037 1,7037 1,7037 1,7037 1,6987 1,6937 1,6837	9.52105 9.52105 9.52105 9.52105 9.49325 9.46539 9.43749 9.40954	1.8564 1.9773 2.1062 2.2434 2.3740 2.5128 2.6602 2.8169	1.27088 1.35368 1.44187 1.53580 1.62524 1.72025 1.82119 1.92846	5.7214 5.7214 5.7214 5.7214 5.7023 5.6831 5.6648	9.45211 9.45211 9.45211 9.42052 9.38889 9.35724 9.32555
58000 58534 322.405 1.4434 9.18414 4.4874 3.07203 5.4907 9.07094 58500 55043 321.781 1.4383 9.15574 4.7610 3.25938 5.4713 9.03897 59000 59553 321.156 1.6332 9.12728 5.0525 3.45894 5.4519 9.00697 59500 60062 320.529 1.6281 9.09878 5.3631 3.67156 5.4326 8.97494	55500 56000 56500 57000 57500 58000 58500 59000	55989 56498 57007 57516 58025 58534 59043 59553	325.506 324.888 324.269 523.649 523.027 322.405 321.781 321.156	1.4687 1.6586 1.6585 1.6585 1.6485 1.6434 1.6383	9.32539 9.29724 9.26904 9.24079 9.21249 9.18414 9.15574 9.12728	3.3489 3.5492 3.7622 3.9890 4.2304 4.7610 5.0525	2.29261 2.42973 2.57561 2.73085 2.89610 3.07203 3.25938 3.45894	5.5871 5.5679 5.5486 5.5293 5.5100 5.4907 5.4713 5.4519	9.19849 9.16665 9.13478 9.10287 9.07094 9.03897 9.00697

TABLE III. - Continued
GEOMETRIC ALTITUDE, METRIC UNITS

Δltit	ude	Sound speed	Coefficient	of viscosity.	Kinematic	viscosity	Thermal c	onductivity
Z, m	H, m	C _S ;	μ, kg m ⁻ⁱ sec ⁻ⁱ	$\frac{\mu}{\mu_0}$	η, m² sec-1	$\frac{\eta}{\eta_0}$	k, k-cal m ⁻¹ .sec ⁻¹ (°K) ⁻¹	<u>_k;</u> k _o
38000 38200 38400 38600 38600 39000 39200 39400 39400 39800	37774 37972 38169 38367 38565 38762 38960 39157 39355 39552	313.665. 314.019 314.373 314.727 315.080 315.432 315.765 316.136 316.488 316.839	7.5723 - 5. 1.5751 1.5780 1.5809 1.5838 1.5866 1.5895 1.5924 1.5952	8.78667 - 1 8.80277 8.81884 8.63490 8.855094 6.88697 6.88298 8.89897 8.91494 8.93090	2.9298 - 3 3.0239 3.1209 3.2207 3.3235 3.4293 3.5382 3.6503 3.7657 3.8844	2.00569 + 2 2-07016 2.13653 2-20487 2.27523. 2.34766 2.42222 2.49897 2-57797 2-55926	5-2213 - 6 5-2233 - 6 5-2230 5-2538 5-2647 5-2755 5-2863 5-2971 5-3079 5-3187	8.62599 - 1 8.64390 8.66181 8.67970 8.69758 8.71545 8.73331 8.75116 8.76900 8.78683
#0000 #0200 #0400 #0600 #1000 #1200 #1400 #1600 #1800	39750 39947 40145 40342 40540 40737 40935 41132 41329 41527	317.189 317.539 317.889 318.238 318.587 318.936 319.284 319.632 319.979 320.326	1.6009 - 5 -1.6066 1.6066 1.6095 1.6123 1.6151 1.6180 1.6208 1.6236	8.94683 - 1 8.96275 8.97866 8.97855 9.01042 9.02627 9.04211 9.05793 9.077373 9.08951	4.0067 - 3 4.1324 4.2613 4.3950 4.5320 4.6729 4.8179 4.9670 - 5.1204 5.2782	2.74293 + 2 2.82903 2.91762 3.00877 3.10255 3.19904 3.29829 3.40038 3.50540 3.61341	5.3295 - 6 5.3403 5.3510 5.3518 5.3726 5.3833 5.3941 5.4048 5.4155 5.4263	8.80465 - 1 8.82246 8.84025 8.85804 8.87582 8.89358 8.91134 8.792908 8.94681 8.96454
42000 42200 42400 42600 42800 43000 43400 43400 43600 43800	41724 41922 42119 42316 42514 42711 42708 43106 43303 43500	320.672 321.018 321.364 321.709 322.054 322.399 322.743 323.087 323.430 323.773	1.6293 - 5 1.6321 1.6349 1.6377 1.6403 1.6403 1.6401 1.6400 1.6517 1.6545	9.10528 - 1 9.12104 9.13677 9.15249 9.16820 9.18820 9.19955 9.21520 9.23004 9.24646	5.4404 - 3 5.6073 5.7789 5.79553 6.1367 6.32233 6.5150 6.7121 6.9147 7.1230	3.72449 + 2 3.83672 3.95619 4.07698 4.20117 4.32886 4.6013 4.59507 4.73379 4.87637	5.4370 - 6 5.4477 5.4584 5.4691 5.4798 5.4905 5.5012 5.5118 5.5225 5.5332	8.98225 - 1. 8.99995 9.01.764 9.03532 9.05299 9.07065 9.08829 9.10593 9.12356 9.14117
44000 44200 44400 44600 45000 45000 45000 45800 45800	43697 43895 44092 44289 44886 44684 44881 45078 45275 45472	324.116 324.458 324.800 325.141 325.482 325.823 326.163 326.503 326.843 327.182	1.6573 - 5 1.6601 1.6629 1.6657 1.6685 1.6713 1.6740 1.6740 1.6796	9.26207 - 1 9.27765 9.29323 9.3028 9.32432 9.32432 9.3535 9.37084 9.36632 9.40177	7.3371 - 3 7.5571 7.7832 8.0155 8.2543 8.4996 8.7516 9.0105 9.2766	5.02292 + 2 5.17353 5.32831 5.48737 5.65081 5.81875 5.99129 6.16856 6.35068 6.53775	5.5438 = 6 5.5545 5.5555 5.5651 5.5758 5.5864 5.5970 5.6076 5.6183 5.6289 5.6395	9.15878 - 1 9.17638 9.19396 9.21153 9.22910 9.24665 9.26419 9.28172 9.29924 9.31675
46000 46200 46400 46600 47000 47000 47400 47600 47800	45669 45867 46064 46261 46458 46655 46852 47049 47246 47443	327.521 327.859 328.19E 328.535 328.873. 329.210 329.546 329.799 329.799 329.799	1.6851 - 5 1.6879 1.6906 1.6934 1.6961 1.6989 1.7016 1.7037 1.7037	9.41722 - 1 9.43244 9.44345 9.47883 9.47883 9.49419 9.50954 9.52105 9.52105	9.8305 - 3 1.01.15 - 2 1.04.15 1.07.19 1.1031 1.1352 1.1681 1.2005 1.2311 1.2021	6.72992 + 2 6.92730 7.13002 7.33823 7.55204 7.77161 7.99707 8.22111 8.42815 8.64039	5.6501 - 6 5.6606 5.6712 5.6818 5.6924 5.7029 5.7135 5.7214 5.7214	9.33425 1 9.35174 9.36922 9.38669 9.40415 9.42159 9.43903 9.45211 9.45211
#8000 #8200 #8400 #8600 #8600 #9000 #9200 #9400 #9600	47640 47837 48034 48231 48428 48625 48625 48019 49216 49413	329.799 329.799 329.799 329.799 329.799 329.799 329.799 329.799 329.799 329.799	1.7037 - 5 1.7037 1.7037 1.7037 1.7037 1.7037 1.7037 1.7037 1.7037	9.52105 - 1 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105	1.2939 - 2 1.3265 1.3599 1.3941 1.4292 1.4652 1.5399 1.5786 1.6184	8.85796 + 2 9.08100 9.30964 9.54402 9.78428 1.00306 + 3 1.02831 1.05419 1.08072 1.10792	5.7214 - 6 5.7214 5.7214 5.7214 5.7214 5.7214 5.7214 5.7214 5.7214 5.7214	9.45211 - 1 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211
50000 50500 51000 51500 52000 52500 53500 54000 54500	49610 50102 50594 51086 51578 52070 52562 53053 53545 54037	329-799 329-799 329-799 329-799 329-799 329-713 320-114 328-513 327-911 327-308	1.7037 - 5 1.7037 1.7037 1.7037 1.7037 1.7030 1.6981 1.6982 1.6883	9.52105 - 1 9.52105 9.52105 9.52105 9.52105 9.51717 9.48981 9.44241 9.44241 9.43497	1.6591 - 2 1.7654 1.8786 1.9989 2.1270 2.2612 2.3907 2.5281 2.6740 2.8288	1.13580 + 3 1.20860 1.28606 1.36846 1.45614 1.54798 1.63666 1.73074 1.83059 1.93658	5.7214 - 6 5.7214 5.7214 5.7214 5.7214 5.7187 5.6999 5.6811 5.6622 5.6434	9.45217 - 1 9.45217 9.45217 9.45217 9.45217 9.45217 9.41770 9.41662 9.38551 9.355388 9.32323
55000 55500 56000 56000 57000 57500 58000 58500 59500	54528 55020 55511 56002 56493 56984 57476 57966 58457 58948	326.703 326.098 325.492 324.885 324.277 323.668 323.058 322.446 321.834 321.220	1.6784 - 5 1.6735 1.6686 1.6636 1.6587 1.6537 1.6487 1.6487 1.6387	9.37994 - 1 9.35239 9.32478 9.29712 9.24941 9.24167 9.21388 9.18604 9.15816 9.13024	2.9932 - 2 3.1677 3.3531 3.5500 3.7593 3.9818 4.2182 4.4696 4.77370 5.0214	2.04910 + 3 2.16859 2.29551 2.43034 2.57361 2.72589 2.88776 3.05988 3.24293 3.43765	5.6245 - 6 5.6056 5.5678 5.5678 5.589 5.5299 5.5109 5.4920 5.4730 5.4730	9.29205 - 1 9.26084 9.22961 9.19835 9.16707 9.13577 9.10444 9.07308 9.04170 9.01029

TABLE III. - Concluded GEOPOTENTIAL ALTITUDE, METRIC UNITS

:	 	T	r MEQPI	OTENTIAL ALT	HODE, MEIN	IIC UNITS	· · · · · · · · · · · · · · · · · · ·	
Altii	tude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal c	onductivity
H, m	Z, m	C _S ,	μ ,	$\frac{\mu}{\mu_{o}}$	η, m² sec-l	$\frac{\eta}{\eta_0}$	k, k-cal m ⁻¹ sec ⁻¹ (°K) ⁻¹	k k _o
60000 60500 61000 61500 62000 62500 63500 64500 64500	60572 61081 61591 62101 62611 63121 63631 64141 64651 65161	319.902 319.273 318.643 317.379 316.111 314.837 313.558 312.273 310.984 309.689	1.6230 - 5 1.6179 1.6128 1.6025 1.5922 1.5818 1.5714 1.5610 1.5505 1.5400	9.07023 - 1 9.04162 9.01296 8.95549 8.89780 8.83990 8.78179 6.72347 8.66492 8.66492	5.6941 - 2 6.0469 6.4231 6.7763 7.1519 7.5516 7.9769 8.4299 8.9126 9.4271	3-89814 + 3 4-13968 4-39720 4-63902 4-89617 5-16975 5-46095 5-77108 6-10151 6-45376	5.4132 - 6 5.3037 5.3743 5.3353 5.2963 5.2572 5.2180 5.1788 5.1395 5.1001	8-94288 - 1 8-91079 8-87867 8-81433 8-74986 8-68527 8-62056 8-55572 8-49075 8-42566
65000 65500 66000 66500 67500 67500 68000 68500 69000	65672 66182 66693 67203 67714 68225 68735 69246 69757 70268	308.388 307.083 305.771 304.454 303.131 301.802 300.468 299.127 297.781 296.428	1-1:294 - 5 1-5168 1-5082 1-4975 1-4868: 1-4760 1-4652 1-4544 1-4435	8.54718 - 1 8.48797 8.42853 8.36887 8.30899 8.24886 8.18851 8.12792 8.06710 8.00603	9.9760 - 2 1.0562 = 1 1.1187 1.1855 1.2569 1.3333 1.4150 1.5025 1.5963 1.6968	6.82948 + 3 7-23042 7.65852 8.11587 8.60473 9.12757 9.68707 1.02862 + 4 1.09280	5.0606 - 6 5.0211 4.9814 4.9817 4.9020 4.8621 4.8222 4.7822 4.7822 4.7019	8.369\\$5 - 1 8.295\\$1 8.2296\\$8.16\\$05 8.16\\$05 8.0983\\$8.0983\\$7.9665\\$7.900\\$6 7.83\\$25 7.76792
70000 70500 71500 71500 72000 72500 73500 74000 74500	70780 71291 71802 72314 72825 73337 73648 74360 74872 75384	295.069 293.704 292.333 290.955 289.570 288.179 286.781 285.376 283.965 282.546	1.4216 - 5 1.4106 1.3995 1.3864 1.3773 1.3661 1.3549 1.3436 1.3323 1.3209	7.94472 - 1 7.88317 7.82138 7.75933 7.69704 7.63449 7.57169 7.50864 7.44532 7.38174	1.8046 - 1 1.9203 2.0446 2.1782 2.3219 2.4766 2.6431 2.8225 3.0161 3.2250	1.23543 + 4 1.31466 1.39975 1.499121 1.58958 1.69543 1.80944 1.93230 2.06480 2.20780	4.6617 - 6 4.6214 4.5810 4.5806 4.5001 4.4595 4.4188 4.3781 4.3773 4.2964	7.70146 - 1 7.63488 7.56818 7.56818 7.50136 7.43442 7.36735 7.30017 7.23286 7.16544 7.09789
75000 75500 76000 76500 77000 77500 78500 78500 79000	75896 76408 76920 77432 77944 78969 79482 79994 80507	281.12 279.69 278.25 276.80 275.34 273.88 272.41 270.93 269.44	1.309 - 5 1.298 1.286 1.275 1.263 1.252 1.240 1.228 1.216	7.3179 - 1 7.2538 7.1894 7.1248 7.0599 6.9947 6.9292 6.8625 6.7974	3.451 - 1 3.694 3.958 4.224 4.553 4.889 5.253 5.648 6.078	2.3623 + 4 2.5292 2.7098 2.9053 3.1171 3.3468 3.5960 3.8668 4.1611 4.5738	4.255 - 6 4.214 4.173 4.173 4.132 4.091 4.050 4.008 3.967 3.925	7.0302 - 1 6.9625 6.8265 6.7584 6.6902 6.6218 6.5554 6.4848
80000 80500 81000 81500 82000 83500 83500 84000 84500	81020 81533 82046 02559 83072 83585 84098 84612 85125 85639	269.44 269.44 269.44 269.44 269.44 269.44 269.44 269.44	1.216 - 5 1.216 1.216 1.216 1.216 1.216 1.216 1.216 1.216 1.216	6.7974 - 1 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974	7.344 - 1 8.072 8.872 9.752 1.072 + 0 1.178 1.295 1.424 1.565 1.720	5.0274 + 4 5.5259 6.0739 6.6763 7.3384 8.0661 3.8661 9.7453 1.0712 + 75	3.925 - 6 3.925 3.925 3.925 3.925 3.925 3.925 3.925 3.925 3.925 3.925	6.4848 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848
85000 85500 86000 86500 87000 87500 88000 88500 89000 89500	86152 86666 87180 87693 88207 88721 89236 89750 90264 90778	269.44 269.44 269.44 269.44 269.44 269.44 269.44 269.44 270.03 271.18	1.216 - 5 1.216 1.216 1.216 1.216 1.216 1.216 1.216 1.221 1.221	6.7974 - 1. 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.8235 6.8741	1.890 + 0 2.078 2.284 2.510 2.759 3.033 3.334 3.665 4.061 4.531	1.2942 + 5 1.4225 1.5636 1.7187 1.8891 2.0764 2.2824 2.5087 2.7799 3.1019	3.925 - 6 3.925 3.925 3.925 3.925 3.925 3.925 3.925 3.925 3.925	6.4848 - 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.5118 6.5644
90000	91293	272.32	1.239 - 5	6.9245 - 1	5.051 + 0	3.4580 + 5	4.005 - 6	6.6170 - 1
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TABLE III.— Concluded.

GEOMETRIC ALTITUDE, METRIC UNITS.

Altit	ude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal c	onductivity
Z, m	H,m	C _S ,	μ, kg m ⁻ⁱ sec ⁻ⁱ	$\frac{\mu}{\mu_0}$	η, m²:sec≃i	$\frac{\eta}{\eta_0}$	k, k-cal m-t sec-t(eK)-t	k.
60000 60500 61000 61500 62000 62500 63500 63500 64500	59439 59930 60420 60914 61401 61801 62382 62872 63362 63852	320.606 319.990 319.374 318.756 317.630 316.387 315.139 313.886 312.628 311.366	1.6287 - 5 1.6237 1.6187 1.6187 1.5045 1.5944 1.5843 1.5741 1.5638	9.10227 - 1 9.07425 9.04619 9.01809 8.9668 8.91035 8.85363 8.79671 8.73959 8.68227	5.3241 - 2 5.6462 5.9890 6.3541 6.7047 7.16844 7.4547 7.8653 8.3020 8.7665	3.64484 + 3 3.86533 4.10004 4.34994 4.58998 8.83895 5.10345 5.38457 5.68350 6.00151	5.4349 - 6 5.4159 5.3968 5.3778 5.3431 5.3048 5.2665 5.2281 5.1896 5.1511	8.97886 — 1 8.94740 8.91592 6.8841 8.82707 8.76388 8.70057 8.63716 8.57363 8.50999
65000 65500 66500 67000 67000 68500 68500 69000 69500	64342 64832 65322 65811 66301 66791 67280 67770 68259 68748	310.099 308.826 307.549 306.266 304.979 303.686 302.387 301.084 299.774	11.5433 - 5 1.5330 1.5226 1.5122 1.5018 1.4913 1.4808 1.4702 1.4596 1.4890	8.62476 - 1 8.56703 8.50971 8.45098 8.39264 8.33409 8.27533 8.21635 8.15716 8.09775	9.2609 - 2 9.7874 1.0346 - 1 1.0546 1.1584 1.224 1.2991 1.3767 1.4596 1.5483	6.33998 + 3 6.70042 7.08482 7.08482 7.49378 7.49307 8.39607 8.89335 9.42453 9.99222 1.05993 + 4	5.1125 - 6 5.0739 5.0352 4.9954 4.9575 4.9186 4.8796 4.8406 4.8015 4.7623	8.44625 - 1 8.38239 8.31842 8.25435 8.19016 8.12587 8.06147 7.99695 7.93233 7.86760
70000 70500 71000 71500 72000 72500 73000 73500 74000 74500	69237 69727 70216 70705 71193 71682 72171 72660 73148 73637	297.139 295.813 294.482 293.144 291.800 290.451 289.095 287.733 286.365 284.991	1.4383 - 5 1.4276 1.4169 1.4061 1.3953 1.3884 1.3735 1.3625 1.3515 1.3405	8.03813 - 1 7.97828 7.91821 7.85792 7.79740 7.73665 7.67567 7.61846 7.55301 7.49133	1.6431 - 1 1.7447 1.8535 1.9701 2.0952 2.2294 2.3736 2.5284 2.6949 2.8741	1.12488 + 4 1.19442 1.26890 1.34874 1.52625 1.52625 1.62492 1.73094 1.84493 1.96757	4.7230 - 6 4.6837 4.6643 4.6049 4.5654 4.5658 4.4865 4.4865 4.4865 4.4865	7.80276 - 1 7.73782 7.677276 7.60760 7.54234 7.47696 7.41148 7.34590 7.28021 7.21442
75000 75500 76500 76500 77600 77600 78000 78000 79000 79500	74125 74614 75102 75590 76078 76566 77054 77542 78030 78518	283.61 282.22 280.83 279.43 278.02 276.61 275.18 273.76 272.32 270.88	1.329 - 5 1.318 1.307 1.296 1.285 1.273 1.262 1.251 1.239 1.228	7.4294 - 1 7.3673. 7.3049 7.2422 7.1793 7.1162 7.0528 6.9891 6.9253 6.8611	3.067 - 1 3.275 3.499 3.741 4.001 4.283 4.588 4.918 5.276 5.663	2.0996 + 4 2.2419 2.3952 2.5607 2.7394 2.9324 3.1412 3.3671 3.6117 3.8769	4.327 - 6 4.287 4.247 4.207 4.167 4.167 4.086 4.046 4.006 3.965	7.1485 - 1 7.0825 7.0164 6.9502 6.8839 6.8175 6.7510 6.6844 6.6177 6.5509
80000 80500 81500 81500 82500 82500 83500 84000 84500	79006 79493 79981 80466 80956 81443 81930 82417 82904 83391	269.44 269.44 269.44 269.44 269.44 269.44 269.44 269.44 269.44	1.216 - 5 1.216 1.216 1.216 1.216 1.216 1.216 1.216 1.216 1.216	6.7974 - 1 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974	6.085 - 1 6.672 7.317 8.023 8.798 7.647 1.058 + 0 1.160 1.272	4.1655 + 4 4.5079 5.0090 5.4927 6.0231 6.6045 7.2420 7.9409 8.7071 9.5470	3.925 - 6 3.925 3.925 3.925 3.925 3.925 3.925 3.925 3.925 3.925 3.925	6.4848 — 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848
85000 85500 86000 86500 87000 87500 88500 88500 89500	83878 84365 84852 85339 85825 86312 86798 87285 87771	269.44 269.44 269.44 269.44 269.44 269.44 269.44 269.44	1.216 - 5 1.216 1.216 1.216 1.216 1.216 1.216 1.216 1.216 1.216 1.216 1.216	6.797% - 1 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797%	1.529 + 0 1.677 1.838 2.015 2.210 2.423 2.656 2.912 3.193 3.500	1.0468 + 5 1.1477 1.2584 1.3797 1.5127 1.6585 1.8184 1.9936 2.1856 2.3961	3.925 - 6 3.925 3.925 3.925 3.925 3.925 3.925 3.925 3.925 3.925	6.4848 - 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848
90000	88743	269.44	1.216 - 5	6.7974 - 1	3.837 + 0	2.6268 + 5	3.925 - 6	. 6.4848 - 1
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Table IV TEMPERATURE, PRESSURE, AND DENSITY English Units

Note: A one- or two-digit number (preceded by a plus or minus sign) following the initial entry of each block indicates the power of ten by which that entry and each succeeding entry of that block should be multiplied. A change of power occurring within a block is indicated by a similar notation.

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TABLE IV GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

				-,-	,	ENGLISH			- · · · · · · · · · · · · · · · · · · ·
Altit	rude	Т	emperatur	e ⁻		Pressure		Den	sity
н, 📆	Z, ft	Ť, °R	t,°F	t,°C	P, mb	P, in Hg	<u>P</u>	ρ, lb.ft ⁻⁸	<u>ρ</u> <u>ρ</u> ο
-16500 -16400 -16300 -16200 -16100	-16487 -16387 -16287 -16187 -16088	577.512 577.155 576.798 576.442 576.085	117-842 117-485 117-128 116-772 116-415	47.690 47.492 47.294 47.095 46.897	1.78241 + 3 1.77663 1.77087 1.76512 1.75939	5.26344 + 1 5.24638 5.22936 5.21239 5.19547	1.75910 + 0 1.75340 1.74771 1.74204 1.73638	1.2082 = 1 1.2050 1.2019 1.1987 1.1955	1.5799 + 0 1.5757 1.5716 1.5674 1.5633
-16000 -15900 -15800 -15700 -15500 -15500 -15300 -15300 -15100	-15988 -15888 -15788 -15788 -15588 -15488 -15489 -15189 -15189	575.729 575.372 575.015 574.302 573.945 573.589 573.232 572.876 572.519	116.059 115.702 115.345 114.989 114.632 114.275 113.552 113.562 113.206	46.699 46.501 46.303 46.105 45.907 45.709 45.510 45.312 44.916	1.75367 + 3 1.74797 1.74228 1.73661 1.73661 1.73095 1.72531 1.71969 1.71407 1.70848 1.70289	5.17859: + 1 5.16175 5.14496 5.12821 5.11150 5.07488: 5.07823 5.06165 5.04513	1.73074 + 0 1.72511 1.71950 1.71950 1.71390 1.70832 1.70275 1.69720 1.69720 1.686613 1.68062	1. 1924 - 1 1. 1893 1. 1861; 1. 1830 1. 1798 1. 1768 1. 1736 1. 1735 1. 1765 1. 1765	1.5592 + 0 1.5551 1.55510 1.5469 1.5428 1.5388 1.5347 1.5306 1.5266
-15000 -14900 -14800 -14700 -14600 -14500 -14300 -14200 -14100	-14989 -14889 -14790 -14590 -14590 -14490 -14290 -14190 -14090	572.162 571.806 571.449 571.093 570.736 570.379 570.023 569.666 569.309 568.953	112.492 112.136 111.779 111.423 111.066 110.709 110.353 109.996 109.639	44.718 44.520 44.322 94.124 43.926 93.727 43.529 43.331 43.133 42.935	1.69733 + 3 1.69177 1.68623 1.68071 1.67520 T.66971 1.66423 1.65876 1.65331	5.01220 + 1 4.97580 4.97795 4.976314 4.94687 4.93065 4.91447 4.69633 4.88223 4.86618	1.67513 + 0 1.66965 1.66418 1.65373 1.65330 1.64707 1.64247 1.63707 1.63109 1.62633	1. 1613 - 1 1. 1582 1. 1551 1. 1551 1. 1490 1. 1490 1. 1429 1. 1399 1. 1358	1.5185 + 0 1.5185 1.5105 1.5065 1.5025 1.4985 1.4945 1.4905 1.4866
-14000 -13900 -13800 -13600 -13500 -13500 -13400 -13200 -13100	-13991 -13891 -13791 -13691 -13591 -13491 -13391 -13292 -13192 -13092	568.240 567.883 567.526 567.170 566.813 566.857 566.100 565.783 565.387	108.926 108.570 108.213 107.856 107.500 107.143 106.787 106.430 106.073 105.717	42.737 42.539 42.341 42.142 41.944 41.746 41.548 41.350 41.152	1.64246 + 3 1.63705 1.63166 1.62628 1.62629 1 1.61556 1.61023 1.60491 1.59960 1.59431	4.85017 + 1 4.83820 4.81828 4.80240 4.778656 4.77076 4.75501 4.73929 4.72362 4.70799	1.62098 + 0 1.61564 1.61032 1.60501 1.59972 1.59972 1.58917 1.58392 1.57346	1.1308 - 1. 1.1278 1.1248 1.1218 1.1188 1.1158 1.1128 1.1088 1.1008	1.4786 + 0 1.4747 1.4708 1.4668 1.4668 1.4629 1.4551 1.4512 1.4512 1.4473 1.4435
-13000 -12900 -12800 -12700 -12700 -12500 -12500 -12300 -12200 -12100	-12992 -12892 -12792 -12692 -12592 -12593 -12393 -12293 -12193 -12093	565.030 564.673 564.317 563.960 563.604 563.247 562.890 562.534 562.177 561.821	105.360 105.003 104.647 104.290 103.934 103.577 103.220 102.864 102.507	40.756 40.557 40.359 40.161 39.963 39.765 39.369 39.369 30.477	1.58903 + 3 1.58377 1.57852 1.57328 1.56806 1.56285 1.55248 1.55248 1.55248	4.67660 4.66136 4.64590 4.64590 4.63048 4.61510 4.59976 4.58447 4.56421 4.55400	1.56825 + 0 1.56306 1.55788 1.55271 1.54755 1.5424 1 1.53729 1.53218 1.52708	1.1009 - 1 1.0980 1.0950 1.0921 1.0891 1.0862 1.0833 1.0804 1.0745	1.4396 + 0 1.4357 1.4319 1.4280 1.4282 1.4203 1.4165 1.4165 1.4167 1.4089
-12000 -11900 -11800 -11700 -11600 -11500 -11300 -11300 -11200	-11993 -31893 -11793 -11693 -11694 -11394 -11294 -11194 -11094	561.464. 561.107. 560.751. 560.374. 560.037. 559.481. 559.324. 558.968. 558.411.	101.79% 101.437 101.081 100.72% 100.367 100.011 99.65% 99.298 98.941 98.58%	38.774 38.576 38.378 38.360 37.982 37.784 37.388 37.388 37.388	1.53702 + 3 1.53190 1.52679 1.52679 1.51661 1.51154 1.50649 1.50144 1.49642 1.49140	4.53883 + 1 3.52369 4.50860 4.49355 4.49355 4.49355 4.49355 4.4865 4.4865 4.41891 4.40411	1.51692 ± 0 1.51187 1.50682 1.50179 1.49478 1.49177 1.48679 1.48181 1.47685	1.0716 - 1 1.0687 1.0659 1.0630 1.0601 1.0572 1.0544 1.0515 1.0456	1.4013 + 0 1.3975 1.3937 1.3937 1.3990 1.3862 1.3862 1.3767 1.3750 1.3713 1.3675
-11000 -10900 -10800 -10700 -10500 -10500 -10300 -10200 -10100	-10994 -10894 -10794 -10595 -10595 -10495 -10395 -10295 -10195 -10095	557,898 557,541 557,185 556,828 556,871 556,115 555,758 555,758 555,045 555,045	98.228: 97.871 97.515 97.158 96.801 96.445 96.088 95.731 95.375	36.793 36.595 36.397 36.199 36.001 35.803 35.604 35.406 35.208 35.010	1.48040 + 3 1.48141 1.47644 1.47148 1.4253 1.46160 1.45668 1.45178 1.4688	4.38934 + 1 4.37461 4.35993 4.34528 4.33067 4.31611 4.30158 4.28709 4.27764 4.25824	1.46696 + 0 1.46204 1.45713 1.45724 1.44736 1.44736 1.43763 1.43763 1.43776 1.42796	1.0430 - 1 1.0401 1.0373 1.0345 1.0317 1.0289 1.0261 1.0233 1.0205 1.0177	1.3638 + 0 1.3601 1.3564 1.3527 1.3590 1.3454 1.3417 1.3380 1.3384 1.3307
-10000 -9900 -9800 -9800 -9400 -9500 -9300 -9300 -9200 -9100	-9995 -9895 -9795 -9695 -9598 -9496 -9396 -9296 -9196	554.332 553.975 553.418 553.262 552.905 552.540 552.192 551.835 531.479 551.122	94.662 94.305 93.948 93.592 93.235 92.879 92.522 92.165 91.809 91.452	34.812 34.614 34.616 34.218 34.020 33.821 33.623 33.425 33.227 33.029	1.43714 + 3 1.43229 1.42745 1.42745 1.42745 1.41781 1.41301 1.40822 1.40345 1.39849	4.24387 + 1 4.2295b 4.21525 4.20099 4.18678 4.17261 4.15847 4.15847 4.13032 4.13032	1.41835 + 0 1.41356. 1.40878 1.40402 1.39927 1.39981 1.38509 1.38507 1.37571	1.0149 - 1 1.0121 1.0003 1.0066 1.0038 1.00011 9.9832 - 2 9.9558 9.9285 9.9012	1.3271 + 0 1.3235 1.3198 1.3102 1.3126 1.3090 1.3054 1.3019 1.2983
h ;)							:	, <u>s</u>	

TABLE IX
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	uda	· ·	emperatur			Dragging ON			_:
	r ·		emperatur			Pressure		Den	SITY
Z, ft	H, ft	Ţ, °R	t,°F	t, °C.	P, mb	P, in Hg	P Po	ρ, lb ft ⁻³	<u>P</u>
-16500 -16400 -16300 -16200 -16100	-16513 -16413 -16313 -16213 -16112	577.558 577.201 576.844 576.487 576.130	117.888 117.531 117.174 116.817 116.460	47.716 47.517 47.319 47.120 46.922	1.78316 + 3 1.77737 1.77160 1.76584 1.76010	5.26567 + 1 5.24858 5.23153 5.21453 5.19757	1-75984 + 0 1-75413 7-74843 1-74275 1-73708	1-2086 - 1 1-2054 1-2023 1-1991 1-1959	1.5804 + 0 1.5763 1.5721 1.5680 1.5638
-16000 -15900 -15800 -15700 -15600 -15500 -15300	-16012 -15912 -15812 -15712 -15612 -15512 -15311	575.772 575.415 575.058 574.701 574.344 573.987 573.629 573.272	116.102 115.745 115.388 115.034 114.674 114.317 113.959	46.724 46.525 46.327 46.128 45.930 45.731 45.533	1-75437 + 3 1-74866 1-74296 1-73728 1-73161 1-72596 1-72032	5.18066 + 1 5.16379 5.14697 5.13019 5.11345 5.09676 5.08012	1.73143 + 0 1.72579 1.72017 1.71456 1.70897 1.70339 1.49783	1.1928 - 1 1.10965 1.1834 1.1802 1.1774 1.1740 1.1709	1.5597 + 0 1.5556 1.5515 1.5474 1.5433 7.5392 1.5352 1.5311
-15200 -15100 -15100 -14900 -14900 -14700 -14500 -14500 -14300 -14200 -14100	-15211 -15111 -15111 -14911 -14811 -14710 -14510 -14310 -14310 -14210 -14110	572.915 572.558 572.201 571.844 571.487 571.130 570.772 570.415 570.058 569.701 569.344 568.987	113.245 112.888 112.531 1.12.174 1.11.460 111.102 110.745 110.388 110.038 110.031 109.674	45.738 44.738 44.754; 44.54; 44.34; 43.747 43.747 43.549 43.351 43.752 42.954	1-70910 1-70350 1-69793 + 3 1-69236 1-68682 1-68128 1-07577 1-67026 1-65930 1-65384 1-64840	5.04696 5.03044 5.01397 + 1 4.99755 4.98117 4.94853 4.94853 4.93228 4.91607 4.89691 4.88379 4.86771	1.68675 1.68123 1.67572 + 0 1.67023 1.66476 1.65930 1.65385 1.64882 1.64880 1.63760 1.63221 1.62684	1.1678 1.1647 1.1565 1.1555 1.15524 1.1493 1.1493 1.1402 1.14327 1.1402 1.1341	1.5270 1.5230 1.5139 + 0 1.5139 1.5169 1.5069 1.5029 1.4989 1.4909 1.4909 1.4909
-14000 -13900 -13800 -13700 -13600 -13500 -13400 -13300 -13200 -13100	-14009 -13909 -13809 -13709 -13609 -13509 -13409 -13308 -13208 -13108	568.630. 598.273 567.916 567.558 567.201 566.844 566.487 566.487 565.773 565.416	108.960 108.246 107.889 107.531 107.174 106.817 106.816 106.103	42.755 42.557 42.359 42.160 41.962 41.764 41.565 41.367 41.168 40.970	1.64297 + 3 1.63755 1.63215 1.63215 1.62139 1.61603 1.61069 1.60536 1.60005 1.59475	4.85167 + 1 4.83568 4.81973 4.80383 4.78796 4.77214 4.75636 4.774063 4.774063 4.774093	1.62148 + 0 1.61614 1.61081 1.600549 1.60019 1.59490 1.58457 1.58457 1.57389	1.1311 - 1 1.1280 1.1250 1.1250 7.1190 1.1160 1.1130 1.1131 1.1071	1.4790 + 0 1.4751 1.4711 1.4672 1.4633 1.4594 1.4554 1.4515 1.4517
-13000 -12900 -12800 -12700 -12600 -12500 -12400 -12300 -12200 -12100	-13008 -12908 -12808 -12708 -12608 -12507 -12407 -12307 -12207 -12107	565.059 564.702 564.345 563.988 563.631 563.274 562.917 562.560 562.203 561.846	105.389 105.032 104.675 104.318 103.961 103.604 103.287 102.533 102.176	40.772 40.573 40.375 40.177 39.978 39.780 39.581 39.383 39.185	1.58946 + 3 1.58419 1.57893 1.57369 1.56846 1.56846 1.55804 1.35285 1.54252	4.69367 + 1 4.667810 4.66258 4.64709 4.63165 4.61025 4.60089 4.58558 4.57030 4.55507	1.56867 + 0 1.56347 1.55828 1.55311 1.54795 1.54280 1.53767 1.53255 1.522744 1.52235	1.1011 - 1. 1.0982 1.0952 1.0953 1.0894 1.0864 1.0835 1.0806	1.4399 + 0 1.4360 1.4322 1.4283 1.4245 1.4266 1.4168 1.4130 1.4092
-12000 -11900 -11800 -11700 -11600 -11500 -11300 -11300 -11200 -11100	-12007 -11907 -11807 -11707 -11606 -11506 -11406 -11306 -11206 -11106	561.489 561.132 560.774 560.417 560.406 554.763 559.346 558.989 558.632 558.275	101.819 101.462 101.104 100.747 100.390 100.033 99.676 99.319 98.962 98.605	36.788 38.590 38.391 38.193 37.995 37.796 37.598 37.400 37.201 37.003	1.53738 + 3 1.53225 1.522713 1.52203 1.51694 1.51186 1.50680 1.50175 1.49672 1.49170	4-53987 + 1 4-52472 4-50961 4-49454 4-47951 4-46453 4-44958 4-43467 4-41981	1.51727 + 0 1.51221 1.50716 1.50212 1.49710 1.49209 1.48710 1.48211 1.47715 1.47219	1.0718 - 1 1.0689 1.0660 1.0632 1.0603 1.0574 1.0545 1.0517 1.0460	1.4016 + 0 1.3978 1.3940 1.3902 1.3865 1.3827 1.3790 1.3752 1.3758
-11000 -10900 -10800 -10700 -10600 -10500 -10300 -10200 -10100	-11006 -10906 -10806 -10705 -10605 -10505 -10405 -10305 -10205 -10105	557.918 557.561 557.204. 556.847 556.491 556.134 555.777 555.063 554.706	98.248 97.891 97.534 97.177 96.821 96.464 96.107 95.750 95.393	36.805 36.606 36.408 36.210 36.011 35.813 35.615 35.218 35.218	1.48669 + 3 1.48170 1.47672 1.47175 1.46680 1.46680 1.45694 1.45203 1.44713 1.44224	4.39020 + 1 4.375%5 4.36075 4.3608 4.33146 4.31088 4.30233 4.28783 4.27337 4.25894	1.46725 + 0 1.46232 1.45741 1.45251 1.44762 1.44762 1.4275 1.43789 1.43304 1.42820 1.42338	1.0431 - 1 1.0403 1.0375 1.0346 1.0318 1.0290 1.0262 1.0234 1.0236	1.3640 + 0 1.3603 1.3566 1.3529 1.3492 1.3456 1.3419 1.3382 1.3346 1.3309
-10000 -9900 -9800 -9700 -9500 -9500 -9400 -9300 -9200 -9100	-10005 -9905 -9805 -9805 -9705 -9604 -9504 -9304 -9304 -9104	554.349 553.992 553.635 553.278 552.921 552.564 552.207 551.850 551.493 551.136	94.679 94.322 93.965 93.608 93.251 92.894 92.537 92.180 91.823 91.466	34.821 34.623 34.425 34.425 34.028 33.630 33.632 33.433 33.433 33.037	1.43737 + 3 1.43251 1.42767 1.42284 1.41802 1.41321 1.40842 1.40345 1.39888 1.39413	4.24556 + 1 4.23021 4.21590 4.20164 4.18741 4.17322 4.15907 4.14496 4.13089 4.11686	1.41858 + 0 1.41378 1.40900 1.40423 1.39948 1.39973 1.39001 1.38529 1.38559 1.37590	1.0150 - 1 1.0122 1.0025 1.0067 1.0039 1.0012 9.984 - 2 9.9529 9.9529 9.9022	1.3273 + 0 1.3236 1.3200 1.3164 1.3128 1.3092 1.3056 1.3020 1.2984 1.2948

TABLE TV — Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude	T	emperatur	e -	-	Pressure		Den	sity
H, ft	Z, ft	T, °R	t,°F	t,°C	P; mb	P, in Hg	P _o	ρ, lb ft ⁻³	<u> </u>
-9000 -8900 -8800 -8700 -8500 -8500 -8300 -8300 -8100	-8996 -8896 -8796 -8596 -8596 -8497 -8397 -8197 -8097	550. 765 550. 409 550. 952 549. 696 549. 539 548. 982 548. 626 547. 912 547. 556	91.095 90.739 90.382 90.026 89.669 89.312 88.956 88.599 08.243 87.886	32.831 32.633 32.435 32.236 32.236 31.840 31.642 31.444 31.246	1.38921 + 3 1.38448 1.37978 1.37508 1.375040 1.36573: 1.36107 1.35643: 1.35180 1.34718	4.10232 + 1 4.08838 4.07446 4.04679 4.03300 4.03300 4.01925 4.00553 3.99186 3.97822	1.37104 + 0 1.36638 1.36173 1.35710 1.35748 1.34787 1.34327 1.33869 1.33812 1.332956	9.8739 - 2 9.8467 9.8467 9.7926 9.7925 9.7386 9.7117 9.6849 9.6581	1.2911 + 0 1.2840 1.2805 1.2770 1.2773 1.2734 1.2699 1.2629 1.2594
-8000 -7900 -7800 -7700 -7600 -7509 -7400 -7300 -7200 -7100	-7997 -7857 -7797 -7697 -7597 -7497 -7397 -7297 -7198 -7098	547.199 546.843 546.486 546.129 545.773 545.416 545.060 544.703 544.346 543.990	87.529 87.173 86.816 86.459 86.103 85.746 85.390 85.033 84.676 84.320	30.850 30.453 30.453 30.255 30.057 29.661 29.463 29.265 29.067	1.34258 + 3 1.33798 1.33340 1.32884 1.32428 1.31974 1.31521 1.31070 1.30619 1.30170	3-96462 + 1 3-95706 3-93754 3-92405 3-91060 3-89719 3-88382 3-87048 3-85718 3-84392	1-32502 + 0 1-32049 1-31597 1-31146 1-30697 1-30248 1-2980.3 1-29356 1-28911 1-28468	9.6047 - 2 9.5781 9.5515 9.5250 9.4782 9.4772 9.4459 9.4196 9.3334 9.3672	1.2559 ± 0 1.2525 1.2490 1.2455 1.2421 1.2386 1.2352 1.2317 1.2283
-7000 -6900 -6800 -6700 -6500 -6400 -6300 -6200 -6100	-6998 -6898 -6798 -6698 -6598 -6498 -6398 -6298 -6198	543.633 543.276 542.920 542.563 542.207 541.850 541.493 541.137 540.780	83.963 83.606 83.250 82.893 82.537 82.180 81.823 81.467 81.110 80.754	28.868 28.670 28.472 28.274 28.076 27.878 27.680 27.482 27.483 27.085	1.29722 + 3 1.29276 1.20830 1.28386 1.27943 1.27501 1.27061 1.26622 1.26184 1.25747	3.83069 + 1 3.81750 3.80435 3.79124 3.77816 3.76512 3.75211 3.73914 3.72621 3.71331	1.28026 + 0 1.27585 1.27145 1.26707 1.26270 1.25834 1.25399 1.24966 1.24534 1.24103	9.3411 - 2 9.3151 9.2891 9.2631 9.2372 9.2114 9.1856 9.1599 9.1342 9.1086	1.2215 + 0 1.2187 1.2187 1.2113 1.2079 1.2045 1.2011 1.1978 1.1911
-6000 -5900 -5300 -5700 -5500 -5500 -5300 -5200 -5100	-5998 -5898 -5798 -5698 -5598 -5399 -5399 -5199 -5099	540.067 539.710 539.354 538.997 538.640 538.284 537.927 537.571 537.214 536.857	80.397 80.040 79.684 79.327 78.970 78.614 78.257 77.901 77.544 77.187	26.887 26.689 26.491 26.293 26.095 25.897 25.500 25.302 25.104	1.25312 + 3 1.24877 1.24444 1.24012 1.23582 1.23152 1.22724 1.22277 1.21871 1.21447	3.70045 + 1 3.68763 3.67494 3.66208 3.64937 3.63669 3.62404 3.61143 3.59886 3.58632	1.23673 + 0 1.23244 1.22817 1.22391 1.21966 1.21542 1.21119 1.20698 1.20278 1.19859	9.0831 - 2 9.0576 9.0321 9.0321 9.0068 8.9814 8.955.1 8.9309 8.9057 8.8806 8.8556	1.1877 + 0 1.1844 1.18-1 1.1778 1.1744 1.1711 1.1678 1.1645 1.1643 1.1580
-5000 -4900 -4800 -4700 -4500 -4500 -4300 -4200 -4100	-4999 -4899 -4799 -4599 -44599 -4299 -4199 -4199	536.501 536.144 535.788 535.431 535.074 534.718 534.361 534.004 533.648 533.291	76.831 76.474 76.118 75.761 75.404 75.048 74.691 74.334 73.621	24.906 24.708 24.510 24.312 24.314 23.915 23.717 23.519 23.321 23.123	1.21023 + 3 1.20401 1.20180 1.19760 1.19342 1.18924 1.18508 1.18693 1.17679 1.17266	3.57382 + 1 3.56135 3.54891 3.53852 3.52416 3.51163 3.49953 3.48728 3.47505 3.46287	1.194%1 + 0 1.1902% 1.18008 1.1819% 1.17781 1.177369 1.165%8 1.165%8 1.161%0 1.15733	8.8306 - 2 8.8056 8.7807 8.7359 8.7311 8.7003 8.6816 8.6570 8.6524 8.6079	1.1547 + 0 1.1514 1.1482 1.1449 1.1417 1.1385 1.1352 1.1320 1.1288
-4000 -3900 -3800 -3700 -3600 -3500 -3400 -3300 -3200 -3100	-39'99 -3899 -3799 -3699 -3599 -3499 -3399 -3299 -3200 -3100	532.935 532.578 532.221 531.865 531.508 531.152 530.795 530.4838 530.082 529.725	73.265 72.908 72.551 72.195 71.838 71.482 71.125 70.768 70.412 70.055	22.925 22.727 22.529 22.330 22.132 21.736 21.736 21.538 21.340 21.142	1.16855 + 3 1.16444 1.16035 1.15627 1.15220 1.14814 1.14410 1.14006 1.13004 1.13203	3.45071 + 1 3.43859 3.42651 3.41446 3.40244 3.39046 3.37852 3.36660 3.355472 3.34288	1, 15326 + 0 1-14921 1-14518 1-14115 1-13713 1-13713 1-13313 1-12914 1-12515 1-12118 1-1723	8.5834 - 2 8.5590 8.5347 8.5103 8.4861 8.4619 8.4377 8.4136 8.3896	1.1224 + 0 1.1192 1.1160 1.1128 1.1097 1.1065 1.1033 1.1002 1.0970
-300C -2900 -2800 -2700 -2600 -2500 -2400 -2300 -2200 -2100	-3000 -2900 -2800 -2700 -2600 -2500 -2400 -2300 -2200 -2100	529.368 529.012 528.655 528.299 527.992 527.585 527.229 526.872 526.510	69.698 69.342 68.985 68.629 68.272 67.915 67.559 67.202 66.846 66.489	20.944 20.745 20.547 20.349 20.151 19.953 19.755 19.557 19.359 19.161	1.12803 + 3 1.72404 1.12006 1.11610 1.11214 1.10820 1.10427 1.10035 1.09254	3.33107 + 1 3.31929 3.30755 3.29584 3.28416 3.27252 3.26091 3.24933 3.23779 3.22628	1:11328 + 0 1:10934 1:10542 1:10150 1:09760 1:09371 1:08983 1:08596 1:08210	8.3416 - 2 8.3178 8.2939 8.2701 8.2464 8.2227 8.1991 8.1755 8.1520 8.1285	1.0908 + 0 1.0877 1.0845 1.0814 1.0783 1.0752 1.0752 1.0691 1.0660 1.0629
-2000 -1900 -1800 -1700 -1600 -1500 -1400 -1300 -1200 -1100	-2000 -1900 -1800 -1700 -1600 -1500 -1400 -1300 -1200 -1100	525.802 525.446 525.089 524.732 524.376 524.019 523.663 523.306 522.949 522.593	66.132 65.419 65.419 65.062 64.706 64.349 63.993 63.636 63.279 62.923	18.962 18.764 18.566 18.368 18.170 17.972 17.774 17.576 17.377 17.179	1.08866 + 3 1.08478 1.08092 1.07707 1.07322 1.06939 1.06557 1.06176 1.05797	3.21480 + 1 3.20336 3.19195 3.18057 3.18057 3.15792 3.14664 3.15539 3.12418 3.17300	1.07442 + 0 1.07060 1.06678 1.06678 1.06298 1.05519 1.05541 1.05164 1.04413 1.04413	8.1051 - 2 8.0817 8.0584 8.0351 8.0119 7.9888 7.9657 7.9426 7.9196	1.0598 + 0 1.0568 1.0537 1.0507 1.0477 1.0446 1.0416 1.0386 1.0356:
					-	ų.		,	

TABLE IX. -- Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	ude .	Те	emperature	,	-	Pressure	:	Den	sity
Z, ft	H, fit	- ा, °R	t,°F	t,°C	P, mb	P, in Hg	P _o	ρ, lb ft ⁻³	<u>ρ</u> Ρ ₀
-9000 -8900 -8700 -8700 -8500 -8500 -8200 -8100	-9004 -8904 -8804 -8704 -8604 -8503 -8403 -8303 -8203 -8103	550.779 550.422 550.065 549.709 549.352 548.638 548.281 547.924 547.567	91.109 90.752 90.395 90.039 89.682 89.325 88.968 08.611 88.254 87.897	32.838 32.640 32.442 32.244 32.045 31.847 31.649 31.451 31.252 31.054	1,38939 + 3 1,38466 1,37995 1,37955 1,37056 1,36589 1,36123 1,35658 1,35458 1,35458	4-10286 + 1 4-08891 4-07499 4-06112 4-03728 4-0387 4-01971 4-00599 3-99230 3-97230	1.37-122 + 0 1.36-56 1.36-191 1.35-727 1.35-264 1.34-803 1.34-34-3 1.33-38-8 1.33-38-27 1.33-27	9.8750 - 2 9.8478 9.8206 9.7735 9.7665 9.7395 9.7126 9.6857 9.65589 9.6322	1.2913 + 1.2877 1.2842 1.2871 1.2771 1.2736 1.2700 1.2630 1.2630 1.2595
-8000 -7900 -7800 -7600 -7600 -7500 -7400 -7300 -7300 -7100	-8003 -7903 -7803 -7703 -7603 -7503 -7403 -7303 -7202 -7102	547, 210 546, 853 546, 496 545, 763 545, 426 545, 069 544, 712 544, 355 543, 998	87.540 87.183 86.826 86.470 86.113 85.756 85.399 85.042 84.685 84.328	30.856 30.657 30.459 30.261 30.063 29.864 29.468 29.270 29.071	1.34272 * 3 1.33812 1.33354 1.32897 1.32441 1.31986 1.31533 1.31081 1.30630 1.30181	3.94504 + 1 3.95147 3.93793 3.92444 3.91098 3.89755 3.88417 3.887082 3.85751 3.84424	1-32516 + 0 1-32062 1-31610 1-31159 1-30709 1-30260 1-29813 1-29367 1-28922 1-28479	9.6055 - 2 9.5789 9.5523 9.5258 9.4993 9.4729 9.4466 9.4203 9.3940 9.3678	1.2560 1.2526 1.2491 1.2456 1.2422 1.2387 1.2353 1.2318 1.2264 1.2250
-7000 -6900 -6800 -6700 -6600 -6500 -6400 -6300 -6200 -6100	-7002 -6902 -6802 -6702 -6602 -6502 -6402 -6302 -6202 -6102	543.641 543.285 542.928 542.571 542.214 541.857 541.500 541.144 540.787	83.971 83.615 63.258 82.901 82.544 82.187 61.830 81.474 81.117	28.873 28.675 28.477 28.278 28.080 27.882 27.684 27.485 27.287 27.089	1.29733 + 3 1.29286 1.28846 1.288396 1.27552 1.27510 1.27070 1.26630 1.26192 1.25755	3.83100 + 1 3.81781 3.8044 3.79152 3.77843 3.76538 3.75237 3.75237 3.73939 3.72645 3.71354	1.28(36 + 0 1.27595 1.227155 1.227177 1.226279 1.25843 1.25408 1.24974 1.24542	9.3417 - 2 9.3156 9.2896 9.2637 9.2378 9.2119 9.1861 9.1604 9.1347 9.1091	1.2216 + 1.2181 1.2187 1.2183 1.2080 1.2046 1.2012 1.1978 1.1945
-6000 -5900 -5800 -5700 -5500 -5500 -5400 -5300 -5100	-6002 -5902 -5802 -5702 -5602 -5501 -5401 -5301 -5201 -5101	540.073 539.716 539.359 539.003 538.646 538.289 537.932 537.575 537.219 536.862	80.403 80.046 79.689 79.333 78.976 78.619 78.262 77.905 77.549 77.192	26.891 26.692 26.494 26.296 26.098 25.899 25.701 25.503 25.305	1.25319 + 3. 1.24855 1.24451 1.24019 1.23588 1.23159 1.22730 1.22303 1.21877 1.21877	3.70067 + 1 3.68784 3.667504 3.664228 3.64956 3.63687 3.62422 3.61160 3.59902 3.58647	1.23680 + 0 1.23251 1.22824 1.22397 1.21972 1.21548 1.221125 1.20704 1.20283 1.19864	9.0835 - 2 9.0580 9.0326 9.0072 8.9818 8.9565 8.9313 8.9061 8.8810 8.8559	1.1878 4 1.1845 1.1811 1.1778 1.1775 1.1712 1.1679 1.1646 1.1613 1.1580
-5000 -4900 -4800 -4700 -4600 -4500 -4500 -4300 -4200 -4100	-5001 -4901 -4801 -4701 -4601 -4501 -4301 -4301 -4201	536.505 536.148 535.791 535.435 535.078 534.721 534.364 534.008 533.651 533.294	76,835 76,478 76,121 75,765 75,408 75,051 74,694 74,338 73,987	24.908 24.710 24.512 24.314 24.116 23.917 23.719 23.521 23.323	1.21028 + 3 1.20606 1.20185 1.19765 1.19786 1.18928 1.18512 1.18512 1.18096 1.17682	3.57397 + 1 3.56149 3.54905 3.53665 3.52428 3.51195 3.49965 3.49965 3.48739 3.47516 3.46296	1.19446 + 0 1.19029 1.18613 1.18199 1.17785 1.17373 1.16962 1.16143 1.15736	8.8309 - 2 8.8059 8.7810 8.7551 8.7315 8.7066 8.6819 8.6572 8.6572 8.6326	1.1547 + 1.1515 1.1482 1.1450 1.1417 1.1385 1.1353 1.1320 1.1288 1.1256
-4000 -3900 -3800 -3700 -3500 -3500 -3400 -3200 -3100	-4001 -3901 -3801 -3701 -3601 -3501 -3401 -3301 -3200 -3100	532.937 532.581 532.224 531.867 531.510 531.154 530.797 530.440 530.083 529.727	73.267 72.911 72.554 72.197 71.840 71.484 71.127 70.770 70.413 70.057	22.926 22.728 22.530 22.332 22.134 21.935 21.737 21.539 21.341 21.143	1.16858 + 3 1.16447 1.16038 1.15630 1.15630 1.15223 1.14817 1.14412 1.14008 1.13606 1.13205	3.45081 + 1 3.43868 3.42659 3.41454 3.40252 3.37858 3.37858 3.36666 3.355478 3.34293	1.15330 ÷ 0 1.14924 1.14520 1.14117 1.137.16 1.13315 1.12916 1.12517 1.12 120 1.11724	8.5836 - 2 8.5548 8.5548 8.5105 8.4862 8.4620 8.4379 8.4138 8.3897	1.1224 1.1192 1.1160 1.1129 1.1065 1.1034 1.1002 1.0971 1.0939
-3000 -2900 -2800 -2700 -2600 -2500 -2400 -2300 -2200 -2100	-3000 -2900 -2800 -2700 -2600 -2500 -2400 -2300 -2200 -2100	529.370 529.013 528.657. 528.300 527.943 527.586 527.230 526.873 526.516	69.700 69.343 68.987 68.630 68.273 67.916 67.560 67.203 66.846 66.490	20.944 20.746 20.548 20.350 20.152 19.755 19.755 19.557 19.359	1.12805 × 3 1.12406 1.12008 1.11611 1.11216 1.10821 1.10428 1.10036 1.09645 1.09255	3.33112 + 1 3.31934 3.30759 3.29588 3.28420 3.27255 3.26094 3.23782 3.24936 3.23782 3.22630	1.11329 + 0 1.10936 1.10543 1.10152 1.09761 1.09372 1.08984 1.08597 1.08211	8.3418 - 2 8.3179 8.2940 8.2702 8.2465 8.2228 8.1992 8.1756 8.1521 8.1286	1.0908 4 1.0877 1.0845 1.0814 1.0783 1.0752 1.0721 1.0691 1.0660 1.0629
-2000 -1900 -1800 -1700 -1500 -1500 -1400 -1200 -1100	-2000 -1900 -1800 -1700 -1600 -1500 -1400 -1300 -1200 -1100	525.803 525.446 525.090 524.733 524.376 524.020 523.663 523.306 522.950 522.593	66.133 65.776 65.420 65.063 64.706 64.350 63.993 63.636 63.280 62.923	18.963 18.765 18.566 18.368 18.170 17.972 17.774 17.576 17.378	1.08866 + 3: 1.08479 1.08092 1.07707 1.07323 1.06940 1.06558 1.06177 1.05797	3.21482 + 1 3.20338 3.19197 3.18059 3.16924 3.15793 3.14665 3.13540 3.12418 3.11300	1.07443 + 0 1.07060 1.06679 1.06299 1.055919 1.05541 1.05788 1.044788	8.1051 - 2 8.0818 8.0585 8.0352 8.0120 7.9888 7.9657 7.9426 7.8966	1.0599 4 1.0568 1.0537 1.0507 1.0477 1.0446 1.0416 1.0366 1.0356

TABLE IV.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

	Altit	ude 🖽	Te	emperature	• :	. n	Pressure		Den	sity
	H, ft	Z, ft	т, °R	t,°F	t,°C	P, mb	-P, in Hg	P Po	ρ, lh ft ⁻³	<u>ρ</u> Ρ _ο
-	-1000 -900 -800 -700 -500 -500 -400 -300 -200 -100	-1000 -900 -800 -700 -500 -400 -300 -100	522.236 521.880 521.523 521.166 520.810 520.453 520.096 519.740 519.383 519.027	62.566 62.210 61.853 61.456 61.140 60.783 60.426 60.070 59.713 59.357	10.981 16.783 16.585 16.387 16.189 15.991 15.792 15.594 15.396	1.05041 + 3 1.04564 1.04269 1.03261 1.03541 1.03541 1.02428 1.02428 1.02059	3.10185 + 1 3.09073 3.07965 3.06859 3.05757 3.04559 3.03563 3.02471 3.01381 3.00295	1.03667 + 0 1.03295 1.02725 1.02725 1.02556 1.02187 1.01820 1.01454 1.01089 1.00725 1.00362	7.8737 - 2 7.8509 7.8281 7.8053 7.7826 7.7599 7.7373 7.7140 7.6923 7.6923	1.0296. + 0. 1.0266 1.0236 1.0206 1.0177 1.0147 1.0118 1.0088 1.0059 1.0029
ł	0	0	518.670	59.000	15.000	1.01325 + 3	2.99213 + 1	1.00000 + 0	7:6474 - 2	1.0000 + 0
	100 200 300 400 500 600 700 800 900	100 200 300 400 500 600 700 800 900	518.313 517.957 517.600 517.244 516.887 516.530 516.174 515.817 515.460	58.287 58.287 57.930 57.574 57.217 56.860 56.504 56.147 55.790	14.604 14.406 14.208 14.009 13.613 13.613 13.415	1.00959 1.00575 1.00231 9.96689 + 2 9.95075 9.91472 9.87880 9.84298 9.80726	2.98133 2.97056 2.95983 2.94913 2.93846 2.92782 2.91721 2.90663 2.89608	9.96391 - 1 -9.92793 9.89206 9.85629 9.82663 9.78507 9.74961 9.71426 9.67901	7.6251 7.6028 7.5805 7.5583 7.5362 7.5141 7.4920 7.4700 7.4480	9.9708 - 1 9.9416 9.9125 9.8835 9.8545 9.8256 9.7680 9.7630 9.7393
	1000 1100 1200 1300 1400 1500 1600 1700 1800	1000 1200 1300 1300 1400 1500 1600 1700 1800	515.104 514.747 514.391 514.034 513.677 513.321 512.964 512.251 511.894	55.434 55.077 54.721 54.364 54.007 53.651 53.294 52.938 52.581 52.224	13.019 12.821 12.623 12.424 12.226 12.028 11.630 11.632 11.434	9.77165 + 2 9.73615 9.70075 9.66545 9.63026 9.59517 9.56019 9.52531 9.49053 9.45586	2.88557 + 1 2.87508 2.85421 2.85421 2.84382 2.83345 2.62312 2.8122 2.80255 2.79231	9.64387 - 1 9.60883 9.57390 9.573906 9.50433 9.46970 9.43518 9.40075 9.36643 9.33221	7.4261 - 2 764043 7.3825 7.3807 7.3390 7.3174 7.2957 7.2742 7.2527 7.2312	9.7106 - 1 7.6821 9.6535 9.6251 9.5967 9.5964 9.5401 9.5119 9.4838 9.4557
	2000 2100 2200 2300 2400 2500 2600 2700 2800 2900	2000 2100 2200 2300 2400 2500 2600 2700 2800 2900	511.538 511.181 510.824 510.468 510.755 509.755 509.398 509.041 508.685 508.328	51,868 51,511 51,154 50,798 50,481 50,085 49,728 49,371 49,015	11.038 10.839 10.641 10.443 10.447 9.849 9.653 9.453	9.42129 + 2 9.38682 9.35245 9.31818 9.28402 9.24996 9.21600 9.18214 9.14838 9.11472	2-78210 + 1 2-77193 2-76178 2-75166 2-74157 2-73151 2-72148 2-71148 2-71148 2-70152 2-69158	9-29809 - 1 9-26407 9-23015 9-19633 9-16262 9-12900 9-09548 9-06207 9-02875 8-99553	7.2098 - 2 7.1884 7.1671 7.1458 7.1246 7.1034 7.0823 7.0612 7.0402 7.0192	9.4277 - 1 9.3998 9.3719 9.3441 9.3164 9.2887 9.2610 9.2335 9.2060 9.1785
	3000 3100 3200 3300 3400 3500 3600 3700 3800	3000 3100 3200 3301 3401 3501 3601 3701 3801	507.972 507.615 507.258 506.902 506.545 506.188 505.832 505.475 505.119 504.762	48.302 47.945 47.588 47.232 46.875 46.518 46.162 45.805 45.849 45.092	9-056 8-858 8-660 8-464 8-264 8-066 7-868 7-671 7-471	9.08116 + 2 9.04770 9.01435 8.98109 8.94793 8.61487 8.88191 8.88191 8.81628 8.78362	2.68167 + 1 2.67179 2.66194 2.65211 2.64232 2.63256 2.62283 2.61312 2.60345 2.59380	8.96241 - 1 8.92939 8.89647 8.86364 8.83092 8.79829 8.76576 8.73333 8.70100 8.66876	6.9983 - 2 6.977% 6.9566 6.9358 6.9150 6.8943 6.8737 6.8531 6.8325 6.8120	9.1512 - 1 9.1239 9.0966 9.0694 9.0423 9.0152 6.9882 8.9613 8.9344 8.9076
	4000 4100 4200 4300 4500 4500 4600 4700 4800	4001 4101 4201 4301 4501 4501 4601 4801 4801	504.405 504.049 503.692 503.235 502.979 502.622 502.266 501.909 501.552 501.196	44.735 44.379 44.022 43.666 43.309 42.952 42.596 42.239 41.882 41.526	7.075 6.877 6.679 6.481 6.283 6.085 5.886 5.698 5.490 5.292	8.75105 + 2 8.71858 8.68621 8.65393 8.62176 8.55968 8.55769 8.55769 8.49402	2.58418 + 1 2.57460 2.56504 2.55551 2.54600 2.53653 2.52709 2.51767 2.50828 2.49892	8.63661 - 1 8.60457 8.57262 8.54077 8.50901 8.47735 8.44579 8.41432 8.38294 8.35166	6.7916 - 2 - 6.7712 6.7508 6.7508 6.7305 6.7102 6.6908 6.6497 6.6296 6.6296 6.6096	8.8809 - 1 8.8542 8.8275 8.8010 8.7745 8.7480 8.7216 8.6953 8.6690 8.6428
	5000 5100 5200 5300 5400 5500 5600 5700 5800 5900	5001 5101 5201 5301 5401 5501 5602 5702 5802 5902	500.839 500.483 500.126 459.759 499.413 499.056 498.699 498.343 497.986	41.169 40.813 40.456 40.099 39.743 39.386 39.029 38.673 38.316	5.094 4.896 4.698 4.500 4.302 4.103 3.905 3.707 3.509 3.311	8.43072 + 2 8.39922 8.36781 8.33650 8.30528 8.27416 8.24313 8.21220 8.18136 8.15061	2.48959 + 1 2.48029 2.47101 2.46177 2.45255 2.44336 2.433420 2.42506 2.41595 2.40687	8.32048 - 1 8.28939 8.25839 8.22748 8.19667 8.16596 8.13534 5.10481 8.07437 8.04403	6.5896 - 2 6.5696 6.5897 6.5299 6.5101 6.4903 6.4706 6.4509 6.4513	8.6167 ~ 1 8.5906 8.5646 8.5386 8.5127 8.4669 8.4611 8.4354 8.4097
	6000 6100 3200 6300 6400 6500 6600 6700 6800 6900	6002 6102 6202 6302 6402 6502 6602 6702 6802 6902	497.273 496.916 496.560 496.203 495.847 495.490 495.133 494.777 494.420	37.603 37.246 36.890 36.533 36.177 35.820 35.463 35.107 34.750 34.750	3113 2.915 2.717 2.516 2.320 2.122 1.924 1.726 1.528 1.330	8.11996 + 2 8.08940 8.05893 8.02856 7.99828 7.99889 7.93799 7.93799 7.87808	2.39782 + 1 2.38880 2.37980 2.37083 2.36189 2.35298 2.35298 2.34409 2.33523 2.32640 2.31759	8.01377 - 1 7.98361 7.95355 7.92357 7.89369 7.86389 7.83419 7.80458 7.77506 7.77506	6.3922 - 2 6.3727 6.3532 6.3339 6.3145 6.2952 6.2759 6.2567 6.2376 6.2184	8.3586 - 1 8.3331 8.3077 8.2823 8.2570 8.2318 8.2066 8.1815 8.1564 8.1314

TABLE IV.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altii	ude-	Т	emperatur	e	, <u></u>	Pressure	,	Density	
Z, ft '	H, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	<u>ala</u> °	ρ , lb ft ⁻³	$\frac{\rho}{\rho_0}$
-1000 -900 -800 -700 -600 -500 -400 -300 -200 -100	-1000 -900 -800 -700 -600 -500 -400 -300 -200 -100	522.236 521.880 521.523 521.166 520.810 520.453 520.096 519.740 519.383 519.027	62.566 62.210 61.853 61.496 61.140 60.783 60.426 60.070 59.713 59.357	16.981 16.783 16.585 16.387 16.189 15.991 15.792 15.594 5.396	1.05041 + 3 1.04664 1.04289 1.03915 1.03541 1.03169 1.02798 1.02428 1.02059 1.01692	3.10185 + 1 3.09073 3.07965 3.0860 3.05758 3.04659 3.03563 3.02471 3.01381 3.00295	1.03667 * 0 1.03296 1.02925 1.02556 1.02187 1.01820 1.01454 1.01089 1.00725 1.00362	7.8737 = 2 7.8509 7.8281. 7.8053 7.7826. 7.7599. 747373 7.7:148 7.6923 7.6698	1.0296 + 1.0266 1.0236 1.0206 1.0177 1.0147 1.0118 1.0083 1.0059
0 200 300 500 500 600 700 800 900	100 200 300 400 500 600 700 800 900	518.670 518.313 517.957 517.600 517.244 516.887 516.530 516.174 515.817 515.461	59.000 58.643 58.287 57.930 57.574 57.217 56.860 56.504 56.147	15.000 14.802 14.604 14.406 14.208 14.009 13.811 13.613 13.415	1.01325 + 3 1.00959 1.00595 1.00231 9.98689 + 2 9.95075 9.91473 9.87880 9.84299 9.80728	2.98133 2.97056 2.95983 2.94913 2.93846 2.92782 2.91721 2.90663 2.89609	1.00000 + 0. 9.96391 - 1 9.92793 9.89206 9.85629 9.82663 9.78507 9.74962 9.71427 9.67903	7.6474 2 7.6251 7.6028 7.5805 7.5583 7.5362 7.5141 7.4920 7.4700 7.4481	1.0000 9.9708 - 9.9416 9.9125 9.8835 9.8545 9.7968 9.7680 9.7393
1000 1100 1200 1300 1400 1500 1600 1700 1800	1000 1100 1200 1300 1400 1500 1600 1700 1800	515,104 514.747 514.301 514.034 513.678 513.321 512.965 512.251 511.895	55-434 55-077 54-721 54-364 54-008 53-651 53-295 52-581 52-225	13.019 12.821 12.623 12.425 12.427 12.028 11.830 11.632 11.434 11.236	9.77167 + 2 9.73617 9.70077 9.66548 9.63030 9.59521 9.56023 9.52536 9.47059 9.45592	2.88557 + 1 2.87509 2.86464 2.85422 2.84383 2.823347 2.82314 2.81284 2.80257 2.79233	9.64389 - 1 9.60885 9.57392 9.573909 9.50436 9.46974 9.43522 9.40090 9.36648 9.33227	7.4262 - 2 7.4043 7.3825 7.3607 7.3390 7.3174 7.2958 7.2742 7.2527 7.2527	9.7107 - 9.6821 9.6536 9.6251 9.5967 9.5684 9.5402 9.5120 9.4838 9.4558
2000 2100 2200 2300 2400 2500 2600 2700 2800 2900	2000 2100 2200 2300 2400 2500 2600 2700 2800 2900	511.538 511.182 510.825 510.469 510.112 509.756 509.369 509.043 508.686 508.330	51.868 51.512 51.155 50.779 50.442 50.086 49.729 49.373 49.016 48.660	11.038 10.840 10.642 10.444 10.246 10.048 9.850 9.651 9.453 9.255	9.42135 + 2 9.38689 9.35253 9.31827 9.28411 9.25006 9.21611 9.18226 9.14851 9.11486	2.76212 + 1 2.77195 2.76180 2.75168 2.74160 2.73154 2.72152 2.71152 2.70155 2.69162	9.29815 - 1 9.26414 9.23023 9.19642 9.16271 9.12910 9.09559 9.06218 9.02887 8.99566	7.2098 - 2 7.1885 7.1672 7.1459 7.1247 7.1035 7.0824 7.0613 7.0403 7.0193	9.4278 - 9.3999 9.3720 9.3542 9.3164 9.2887 9.2611 9.2336 9.2061 9.1787
3000 3100 3200 3300 3400 3500 3600 3700 3800 3900	3000 3100 3200 3299 3399 3499 3599 3599 3799 3899	507.973 507.617 507.260 506.904 506.547 506.191 505.834 505.478 505.121 504.765	48.303 47.947 47.590 47.234 46.877 46.521 46.164 45.451 45.451	9.057 8.859 8.661 8.463 8.265 8.067 7.869 7.671 7.473 7.275	9.08131 + 2 9.04786 9.01451 6.798126 8.94811 8.91506 8.88211 8.84926 8.81651 8.78386	2.68171 + 1 2.67183 2.66198 2.65217 2.64238 2.63262 2.62289 2.61319 2.60351 2.59387	8.96255 - 1 8.92954 8.89663 8.86382 8.833110 6.79848 8.76596 8.73354 8.70122 8.66899	6.9984 - 2 6.9775 6.9775 6.9359 6.9359 6.8945 6.8738 6.8532 6.8327 6.8122	9.1513 - 9.1240 9.0967 9.0696 9.0425 9.0154 8.9884 8.9615 8.9346 8.9078
4000 4100 4200 4300 4400 4500 4600 4700 4800 4900	3999 4099 4199 4299 4399 4599 4599 4699 4899	504.408 504.052 503.695 503.339 502.982 502.626 502.269 501.913 501.556	44.738 44.382 44.025 43.312 42.956 42.599 42.243 41.886 41.530	7.077 6.879 6.681 6.483 6.285 6.087 5.888 5.690 5.492 5.294	8.75130 + 2 8.71884 8.68648 8.655422 8.66206 8.58999 8.55802 8.52614 8.49437 8.46269	2.58426 + 1 2.57467 2.56512 2.55559 2.54609 2.53662 2.52718 2.51777 2.50839 2.49903	8.63686 - 1 8.60483 8.57289 8.54105 8.50931 8.47766 8.44611 8.41465 8.38329 8.35202	6.7917 - 2 6.7713 6.7510 6.7507 6.7104 6.6902 6.6700 6.6499 6.6298 6.6098	8.8811 - 8.8544 8.8278 8.8012 8.7747 8.7483 8.7219 8.6956 8.6693 8.6431
5000 5100 5200 5300 5400 5500 5600 5700 5800 5900	4999 5099 5199 5299 5399 5499 5598 5698 5798 5898	500.843 500.487 500.131 499.774 499.061 498.705 498.348 497.992 497.636	41.173 40.817 40.461 40.104 39.748 39.391 39.035 36.678 38.322 37.966	5.096 4.898 4.700 4.502 4.304 4.106 3.908 3.710 3.512 3.314	8.43110 + 2 8.39961 8.36822 8.33692 8.30572 8.27461 8.24360 8.21268 8.18185 8.15112	2.48970 + 1 2.48040 2.47113 2.46189 2.45268 2.44349 2.43433 2.42520 2.41610 2.40702	8.32085 - 1 8.28977 8.25879 8.22790 8.19711 8.16640 8.13580 8.10528 8.07486 8.04453	6.5898 - 2 6.5699 6.5500 6.5301 6.5103 6.4906 6.4709 6.4512 6.4316	8.6170 - 8.5909 8.5649 8.5390 8.5131 8.4873 8.4615 8.4358 8.4358 8.4358
6000 6100 6200 6300 6400 6500 6600 6700 6800 6900	5998 6098 6198 6198 6398 6498 6598 6698 6798	497.279 496.923 496.566 496.210 495.854 495.497 495.141 494.784 494.428	37.609 37.253 36.896 36.540 36.184 35.827 35.471 35.114 34.758	3.116 2.918 2.720 2.522 2.324 2.126 1.928 1.730 1.532	8.12048 + 2 8.08994 8.05949 8.02914 7.99887 7.96870 7.93862 7.90864 7.87874	2.39798 + 1 2.38896 2.37997 2.37100 2.36207 2.35316 2.34427 2.33542 2.32659 2.31779	8.01430 - 1 7.98415 7.95410 7.92414 7.89427 7.86450 7.83481 7.80522 7.77571 7.74650	6.3925 - 2 6.3730 6.3536 6.3342 6.3149 6.2956 6.2763 6.2571 6.2380 6.2189	8.3590 - 8.3336 8.3082 8.2828 8.2575 8.2323 8.2071 8.1820 8.1570 8.1320

TABLE IX — Continued

GEOPOTENTIAL ALTHOUG, ENGLISH UNITS

Altit	ude	Т	emperatur	2		Pressure		Den	sity
H, ft	Z, ft	T, °R	t,°F	t,°C	P, mb	ိP, in Hg	P P _o	ρ, lb ft ⁻³	$\frac{\rho}{\rho_o}$
7000 7100 7200 7300 7400 7500 7600 7700 7800 7900	7002 7102 7202 7303 7403 7503 7603 7703 7803 7903	493.707 493.350 492.637 492.637 492.280 491.924 491.567 491.211 490.854	34.037 33.680 33.324 32.967 32.610 32.254 31.897 31.541 31.184 30.827	1.132 0.933 0.735 0.537 0.339 0.141 -0.057 -0.255 -0.453 -0.651	7.81853 + 2 7.78869 7.75935 7.72989 7.70053 7.67125 7.64207 7.61298 7.58397 7.55506	2-30881 + 1 2-30006: 2-29133 2-28264 2-27397 2-26532 2-25670 2-24811 2-23955 2-23101	7.71629 - 1 7.65708 7.65788 7.62861 7.59983 7.57094 7.51342 7.61342 7.49480 7.45626	6.1993 - 2 -6.1893 6.1613 6.1424 6.1235 6.1046 6.0858 6.0670 6.0483 6.0296	8.1064 - 1 8.0567 8.0567 8.0320 8.0072 7.9826 7.9580 7.9334 7.9090 7.8845
8000 8100 8200 8300 8400 8500 8600 8700 8800	8003 8103 8203 8303 8403 8503 8604 8704 8804	490-141 489-784 489-427 489-071 488-358 468-001 487-644 487-288 486-931	30.471 30.114 29.757 29.004 28.688 28.331 27.974 27.618	-0.850 -1.048 -1.246 -1.444 -1.642 -1.840 -2.038 -2.236 -2.435 -2.633	7.52623 + 2 7.49750 7.46885 7.44029 7.41182 7.38344 7.35514 7.32694 7.29882 7.27079	2.22250 + 1 2.21401 2.20555. 2.19712. 2.18871 2.18033. 2.1.7197 2.16364 2.15534 2.14706	7.42781 - 1 7.39945 7.37118 7.34300 7.31490 7.28689 7.25896 7.23113 7.20338 7.17571	6.0110 - 2 5.9924 5.9739 5.9754 5.9369 5.9185 5.9001 5.8818 5.8635 5.8453	7.8602 - 1 7.8359 7.8116 7.7874 7.7633 7.7392 7.7152 7.6912 7.6613 7.6434
9000 9100 9200 9300 9400 9500 9600 9700 9800 9900	9004 9104 9204 9304 9404 9504 9604 9705 9805	486.575 486.218 485.861 485.505. 485.148 484.791 484.435 484.078 483.722 483.365	26.905 26.548 26:191 25.835. 25.478 25.121 24.765 24.408 24.052 23.695	-2.831 -3.029 -3.227 -3.425, -3.623 -3.821 -4.020 -4.218 -4.416	7.24285 + 2 7.21499 7.18722 7.15954 7.13194 7.10443 7.07700 7.04966 7.02241 6.99524	2.13881 + 1 2.13059 2.12238 2.11421 2.10606 2.09794 2.08984 2.08177 2.07372 2.06569	7.14813 - 1 7.12064 7.07323 7.06591 7.03868 7.01152 6.98446 6.95748 6.93058 6.90377	5.8271 - 2 5.8089 5.7908 5.7727 5.7547 5.7367 5.7188 5.7009 5.6830 5.6652	7.6196 - 1 7.5959 7.5722 7.5586 7.5250 7.5015 7.4731 7.4547 7.8313 7.4080
10000 10100 10200 10300 10400 10500 10600 10700 10800 10900	10005 10105 10205 10305 10405 10505 10605 10705 10806 10906	483.008 482.652 482.295 481.939 481.582 481.225 450.869 480.512 480.155 479.799	23.338 22.982 22.625 22.269 21.912 21.555 21.199 20.842 20.485 20.129	-4.812 -5.010 -5.208 -5.404 -5.803 -6.001 -6.199 -6.397 -6.595	6.96816 + 2 6.94116 6.911425 6.88742 6.86068 6.83402 6.80744 6.76095 6.75454 6.72822	2.05770 + 1 2.04972 2.04178 2.03385 2.02596 2.01808 2.01024 2.00241 1.99461	6.87704 - 1 6.85040 6.82383 6.79736 6.77405 6.71405 6.71842 6.669228 6.66621 6.64023	5.6475 - 2 5.6297 5.6121 5.5944 5.5768 5.5593 5.5418 5.5243 5.5243 5.5069 5.4395	7.3848 - 7.3616 3.3385 7.3154 7.2922 7.2465 7.2465 7.2237 7.2009 7.1782
11000 11100 11200 11300 11400 11500 11600 11700 11800 11900	11006 11106 11206 11306 11406 11506 11606 11707 11807	479.442 479.086 478.729 478.372 478.016 477.659 477.303 476.946 476.589 476.233	19.772 19.416 19.059 18.702 18.346 17.989 17.633 17.276 16.919	-6.793 -6.991 -7.189 -7.586 -7.784 -7.982 -8.180 -8.378 -8.576	6.70197 + 2 6.67581 6.64974 6.62374 6.59783 6.577200 6.54625 6.52059 6.49500 6.46950	1.97909 + 1 1.97137 1.96367 1.95599 1.94834 1.94071 1.93311 1.92553 1.91797	6.61433 - 1 6.58852 6.56278 6.53713 6.51155 6.48606 6.46065 6.43532 6.41007 6.38490	5.4721 - 2 5.4548 5.4376 5.4203 5.4032 5.3860 5.3689 5.3519 5.33149 5.33149	7.1555 - 7.1329 7.1103 7.0878 7.0853 7.0429 7.0206 6.9983 6.9761 6.9539
12000 12100 12200 12300 12400 12500 12600 12700 12800 12900	12007 12107 12207 12307 12407 12507 12508 12708 12808 12908	475.876 475.519 475.163. 474.850 474.850 473.736 473.380 473.023 472.667	16.206 15.849 15.493 15.136 14.780 14.423 14.066 13.710 13.353 12.997	-8.774 -8.973 -9.171 -9.369 -9.567 -9.765 -9.963 -10.161 -10.359 -10.557	6.44408 + 2 6.41874 6.39348 6.36830 6.34320 6.34320 6.29324 6.26838 6.24360 6.21890	1.90294 + 1 1.89545 1.88759 1.88055 1.87315 1.86576 1.85839 1.85105 1.84374 1.83644	6.35981 - 1 6.33480 6.30987 6.28502 6.26025 6.23556 6.21095 6.18641 6.16196 6.13758	5.3010 - 2 5.28%1 5.2673 5.2505 5.2505 5.2337 5.2170 5.2003 5.1837 5.1671 5.1505	6.9317 - 6.9097 6.8876 6.8657 6.8437 6.8219 6.8001 6.7783 6.7566 6.7349
13000 13100 13200 13300 13400 13500 13600 13700 13800 13900	13008 13108 13208 13308 13409 13509 13609 13709 13809	472.310 471.953 471.597 471.240 470.883 470.527 470.170 469.814 469.457	12.640 12.283 11.927 11.570 11.213 10.857 10.500 10:144 9.787 9.430	-10.756 -10.954 -11.152 -11.350 -11.548 -11.746 -11.944 -12.142 -12.341 -12.539	6.19428 + 2 6.16974 6.14528 6.12089 6.09659 6.07236 6.04821 6.02413 6.00014 5.97622	1.82917 + 1 1.82192 1.81470 1.80750 1.80032 1.79317 1.78603 1.77693 1.77184 1.76478	6.11328 - 1 6.08906 6.06492 6.04085 6.01686 5.99295 5.96912 5.94536 5.92168 5.89807	5.1340 - 2 5.1175 5.1011 5.0847 5.0683 5.0520 5.0357 5.0195 5.0033	6.7133 6.6918 6.6703 6.6489 6.6275 6.6061 6.5849 6.5036 6.5424 6.5213
14000 14100 14200 14300 14500 14500 14600 14700 14800 14900	14009 14110 14210 14310 14410 14510 14610 14710 14811 14911	468.744 468.387 468.031 467.674 467.317 466.961 466.604 466.891 465.891	9.074 8.717 8.361 8.004 7.647 7.291 6.934 6.577 6.221 5.864	-12.737 -12.935 -13.133 -13.331, -13.529 -13.727 -13.926 -14.124 -14.322 -14.520	5.95238 + 2 5.92862 5.90493 5.88133 5.885779 5.83334 5.81096 5.78765 5.76442 5.74127	1.75774 + 1 1.75072 1.74373 1.73675 1.72981 1.72288 1.71597 1.70909 1.70223 1.69540	5.87455 - 1 5.85109 5.82772 5.80442 5.78119 5.75804 5.73497 5.71197 5.68904 5.66619	4.9710 - 2 4.9549 4.9389 4.9070 4.8070 4.8593 4.8593 4.8593 4.8278	6.5003 - 1 6.4792 6.4583 6.4573 6.4165 6.3957 6.3749 6.3542 6.3535 6.3129
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TABLE IX.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	uďe	Т	emperatur	e		Pressure		Den	sity
Z, ft	H, ft ,	_T, °.R	t,°F	t,°C	P, mb	P, in Hg	P _o	ρ, lb ft ⁻³	$\frac{\rho}{\rho_0}$
7000 7100 7200 7300 7400 7500 7600 7700 7800 7900	6998 7098 7198 7197 7397 7497 7597 7697 7797 7897	493.715 493.302 493.302 492.646 492.290 491.933 491.577 491.221 496.864 490.508	34.045 33.689 33.332 976 32.620 32.263 31.907 31.551 31.194 30.838	1.136 0.938 0.740 0.542 0.344 0.146 -0.052 -0.250 -0.448	7.81923 + 2 7.78961 7.76008 7.73064 7.70130 7.47204 7.64288 7.61380 7.58482 7.55592	2.30702 + 1 2.30027 2.20155 2.28286 2.27419 2.26555 2.25694 2.24035 2.23980 2.23126	7.71698 - 1 7.68775 7.65860 7.62955 7.60059 7.57172 7.57429 7.51424 7.68563 7.45711	6.1998 - 2 6.1808 6.1618 6.1429 6.1240 6.1051 6.0863 6.0676 6.0489 6.0302	8.1070 - 8.0822 8.0573 8.0326 8.0326 8.0079 7.9832 7.9587 7.9314 7.9097 7.8853
8000 8100 8200 8300 8400 8500 8600 8700 8800	7997 8097 8197 8297 8397 8597 8596 8696 8796 8896	490.152 489.795 489.439 489.083 488.726 488.370 488.370 488.310 487.301	30.482 30.125 29.769 29.413 29.056 28.700 28.344 27.987 27.631 27.275	-0.844 -1.041 -1.239 -1.437 -1.635 -1.833 -2.031 -2.229 -2.427 -2.625	7-5271E + 2 7-49840 7-46977 7-44123 7-41278 7-38442 7-35615 7-32796 7-27986 7-27185	2-22276 + 1 2-21428 2-20582 2-19739 2-18899 2-18062 2-17227 2-16395 2-15565 2-14738	7.42868 - 1 7.40034 7.37209 7.34392 7.31585 7.28786 7.25995 7.23213 7.20440 7.17676	6.0116 - 2 5.9930 5.9745 5.9560 5.9375 5.9191 5.9008 5.8824 5.8842 5.8460	7.8609 7.8366 7.8124 7.7882 7.7641 7.7400 7.7160 7.6921 7.6682 7.6443
9000 9300 9300 9300 9500 9500 9600 9700 9800 9900	8996 9096 9196 9296 9396 9496 9596 9695 9795 9895	486.588 486.232 485.876 485.519 485.163 464.807 486.451 486.451 483.738 483.382	26.918 26.562 26.206 25.899 25.893 25.137 24.781 24.424 24.068 23.712	-2.823 -3.021 -3.219 -3.417 -3.615 -4.013 -4.019 -4.209 -4.407 -4.605	7.24393 + 2. 7.21609 7.18834 7.16068 7.13311 7.10562 7.07821 7.05090 7.02366 6.99652	2.13913 + 1 2.13091 2.12272 2.11455 2.16641 2.09829 2.09020 2.08213 2.07409 2.06607	7.14920 - 1 7-12173 7-09434 7-06704 7-03983 7-01270 6-98565 6-93182 6-90503	5.8278 - 2 5.8096. 5.7915 5.7735 5.7555 5.7375 5.7375 5.7196 5.7017 5.6839 5.6661	7.6206 7.5968 7.5732 7.51496 7.5260 7.5025 7.4791 7.4557 7.4324 7.4091
10000 10100 10200 10300 10400 10500 10600 10700 10800	9995 10095 10195 10295 10395 10495 10595 10695 10794	483.025 482.669 482.313 481.950 481.244 480.888 480.532 480.175 479.819	23.355 22.999 22.643 22.287 21.930 21.574 21.218 20.862 20.505 20.149	-4.803 -5.000 -5.198 -5.394 -5.792 -5.792 -6.188 -6.386 -6.584	6.96946 + 2 6.94248 6.91559 6.88678 6.86206 6.83542 6.80887 6.78240 6.75292 6.72971	2.05808 + 1 2.05011 2.04217 2.03426 2.02637 2.01650 2.01066 2.00284 1.99505 1.98728	6.87832 - 1 6.85170 6.82516 6.77870 6.77233 6.74604 6.71983 6.69767 6.66767	5.6483 - 2 5.6306 5.6129 5.5953 5.5777 5.5602 5.5427 5.5252 5.5078 5.4905	7.3859 - 7.3627 7.3396 7.3166 7.2936 7.2707 7.2478 7.2250 7.2022 7.1795
11000 11100 11200 11300 11400 11500 11600 11700 11800	10994 11094 11194 11294 11394 11494 11593 11793 11893	479-463 479-107 478-750 478-394 478-038 477-682 477-326 476-969 476-613 476-257	19.793 19.437 19.080 18.724 18.368 18.012 17.656 17.299 16.7943	-6.782 -6.980 -7.178 -7.375 -7.573 -7.771 -7.969 -8.167 -8.365 -8.563	6.70349 + 2 6.67736 6.65130 6.62533 6.59944 6.57364 6.54791 6.552227 6.49671 6.47123	1.97954 + 1 1.97182 1.95446 1.95446 1.94881 1.94119 1.93360 1.92603 1.91848 1.91095	6.61583 - 1 6.5900h 6.56432 6.53869 6.5131h 6.48767 6.46229 6.43698 6.41175 6.38661	5.4731 - 2 5.4558 5.4386 5.4214 5.4042 5.3871 5.3700 5.3530 5.3530 5.3191	7.1568 ~ 7.1342 7.1117 7.0892 7.0667 7.0444 7.0220 6.9998 6.9775 6.9554
12000 12100 12200 12300 12400 12500 12600 12700 12800 12900	11993 12093 12193 12293 12393 12493 12592 12692 12792 12892	475.901 475.544 475.188 474.832 474.476 474.120 473.764 473.407 473.051 472.695	16.231 15.874 15.518 15.162 14.806 14.450 14.994 13.737 13.381	-8.761 -8.959 -9.157 -9.354 -9.552 -9.750 -9.948 -10.146 -10.542	6.44583 + 2 6.42051 6.39528 6.37012 6.34505 6.32005 6.27514 6.27030 6.24555 6.22087	1.90345 + 1 1.89598 1.88652 1.36110 1.67369 1.86631 1.85895 1.85162 1.84431 1.83702	6.36154 - 1 6.33656 6.31165 6.28682 6.26207 6.23741 6.21282 6.18831 6.16387 6.13952	5.3022 - 2 5.2653 5.2685 5.2517 5.2517 5.2182 5.2016 5.1684 5.1518	6.9333 6.9112 6.8892 6.8672 6.8453 6.8235 6.8017 6.7800 6.7583 6.7367
13000 13100 13200 13300 13400 13500 13600 13700 13800 13900	12992 13092 13192 13292 13391 13491 13591 13591 13791 13891	472.339 471.983 471.626 471.270 470.914 470.558 470.202 469.846 469.890 469.133	12.669 12.313 11.956 11.6956 11.6888 10.532 10.176 9.820 9.463	-10.740 -10.937 -11.135 -11.333 -11.531 -11.729 -11.927 -12.125 -12.322 -12.520	6.19627 + 2 6.17176 6.14732 6.12296 6.09867 6.07447 6.05034 6.002630 6.00233 5.97843	1.82976 + 1 1.82252 1.81530 1.80611 1.80094 1.79379 1.78667 1.77956 1.77249 1.76543	6.11525 - 1 6.09105 6.06693 6.04289 6.01892 5.99504 5.97123 5.94749 5.92384 5.90026	5.1353 - 2 5.1189 5.1024 5.0861 5.0534 5.0534 5.0372 5.0209 5.0048 4.9886	6.715; - 6.6936 6.6721 6.6597 6.6293 6.6080 6.5867 6.5655 6.5444 6.5233
14000 14100 14200 14300 14500 14500 14600 14700 14800	13991 14090 14190 14290 14390 14490 14590 14690 14790 14889	468.777 468.421 468.065 467.709 467.353 466.997 466.640 465.584 465.572	9.107 8.751 8.395 8.039 7.683 7.327 6.970 6.614 6.258 5.902	-12.718 -12.916 -13.114 -13.312 -13.510 -13.707 -13.905 -14.103 -14.301 -14.499	5.95462 + 2 5.93088 5.90722 5.88363 5.86013 5.83670 5.81334 5.79006 5.76686 5.74373	1.75840 + 1 1.75139 1.74440 1.73744 1.73049 1.72358 1.71668 1.70980 1.70295 1.69612	5.87675 - 1 5.85332 5.85997 5.80670 5.78350 5.76037 5.73732 5.71435 5.66862	4.9725 - 2 4.9565 4.9565 4.9245 4.9085 4.8926 4.8768 4.8610 4.8452 4.8294	6.5022 - 6.4812 6.4803 6.4394 6.4186 6.3978 6.3770 6.3563 6.3357

TABLE IV — Continued

GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Aļtit	ude	т	emperatur		ALTITODE,	Pressure		Den	sity
H, ft	Z, ft	T, °R	t,°F	t,°C	P _{j.} mb	P, in Hg	<u>P</u> P ₀	ρ, lb ft ⁻³	<u> P</u>
15000 15100 15200 15300 15400 15500 15600 15700 15800	1501.1 151.1-1 1521.1 1531.1 1531.1 1551.2 1561.2 1571.2 1571.2 1581.2	465.178 464.921 464.464 464.108 463.751 463.395 463.038 462.681 462.681 462.798	5.508 5.151 4.794 4.081 3.725 3.368 3.011 2.655 2.298	-14.718 -14.916 -15.114 -15.312 -15.510 -15.709 -15.709 -16.303 -16.501	5.71819 + 2 5.67519 5.67226 5.64941 5.62663 5.60393 5.58130 5.55874 5.53626 5.51385	1.68858 + 1: 1.68179 1.67502 1.66827 1.66154 1.655484 1.64816 1.64150 1.63486 1.62824	5.64342 - 1 5.62071 5.59809 5.57553 5.55305 5.53064 5.50831 5.48605 5.46386, 5.44175	4.8120 - 2 4.7904 4.7807 4.7651 4.7496 4.7340 4.7185 4.7031 4.6877 4.6723	6.2924 - 1 6.2719 6.2514 6.2310 6.2107 6.1904 6.1701 6.1499 6.1298 6.1097
16000 16100 16200 16300 16400 16400 16400 16400 16900	16012 16112 16213 16313 16413 16513 16613 16713 16814	461-611 461-255 460-898 460-582 460-185 459-828 459-115 458-759 458-402	1.941 1.585 1.228 0.872 0.515 0.158 -0.198 -0.555, -0.911 -1.268	-16.699 -16.697 -17.095 -17.492 -17.490 -17.690 -18.086 -18.482	5.49152 + 2 5.46925 5.46727 5.42495 5.40291 5.38094 5.35904 5.33722 5.31546 5.29378	1.62164 + 1 1.61507 1.60852 1.60199 1.59548 1.58899 1.58252 1.57608 1.56966 1.56325	5.41971 - 1:: 5.39773 5.37584 5.35401 5.33224 5.31057 5.28896 5.26742 5.24596 5.22456	4.6570 - 2 y 4.6417 4.6264 4.5781 4.5981 4.5658 4.5508 4.55357 4.5207	6.0896 - 1 6.0896 6.0897 6.0298 6.0099 5.9901 5.9704 5.9507 5.9511 5.9115
17000 17100 17200 17300 17400 17500 17600 17700 17800 17900	17014 17114 17214 17314 17415 17515 17615 17715 17815 17915	458.045 457.689 457.332 456.619 456.262 455.906 455.549 455.192 455.836	-1.625 -1.981 -2.338 -2.695 -3.051 -3.408 -3.768 -4.121 -4.178 -6.834	-18.680 -18.879 -19.077 -19.473 -19.473 -19.671 -19.867 -20.265 -20.463	5.27217 + 2 5.2506% 5.22917 5.20777 5.186%5 5.16519 5.14401 5.12290 5.10185 5.08088	1.55687 + 1 1.55051 1.55417 1.53785 1.53186 1.52528 1.51279 1.50658 1.50038	5.20323 - 1 5.18197. 5.16079 5.13967 5.11863 5.09765 5.07674 5.05591 5.03514 5.01944	h.5058 - 2 h.4760 h.4760 h.4612 h.4616 h.4169 h.4022 h.3729	5.8919 - 1 5.8530 5.8530 5.8536 5.8142 5.7757 5.7757 5.7757 5.7757
18000 18100 18200 18300 18400 18500 18600 18700 18900	18016 18116 18216 18316 18416 18516 18617 18717	454.479 454.122 453.766 453.409 453.953 452.696 452.339 451.626 451.270	-5.191 -5.547 -5.904 -6.261 -6.617 -6.974 -7.387 -7.687 -8.044 -8.400	-20.662 -20.860 -21.058 -21.256 -21.454 -21.652 -21.850 -22.247 -22.247	5.05998 + 2 5.03915 5.01838 5.99769 4.97766 4.95651 1.93602 4.91560 4.89525 5.87497	1.49421 + 1 1.48806 1.48193 1.47582 1.46973 1.46973 1.46366 1.45761 1.45358 1.44557 1.43955	4.99381 - 1 4.97325 4.95276 4.93233 4.91108 4.89109 4.87147 4.85132 4.81122	4.3584 - 2 4.3438 4.3293 4.3149 4.3005 4.2861 4.2717 4.2574 4.2574	5.6991 - 1 5.6801 5.6612 5.6423 5.6234 5.6234 5.5671 5.5571 5.5584 5.5298
19000 19100 19200 19300 19400 19500 19600 19800 19800	19017 19118 19218 19318 19418 19518 19618 19719 19819	450.913 450.556 450.200 449.843 449.130 449.130 448.4773 448.4773 448.4773	-8.757 -9.114 -9.470 -9.827 -10.184 -10.540 -10.897 -11.253 -11.610 -11.967	-22.643 -22.841 -23.039 -23.237 -23.633 -23.633 -24.028 -24.028	4.85475 + 2 4.83461 4.81453 4.77455 4.77456 4.75470 4.75469 4.73669 4.67586	1.43361 + 1 1.42766 1.42173 1.41562 1.40993 1.400406 1.39821 1.39828 1.38857 1.38078	4.79127 - 1 4.77139 4.75157 4.73182 4.71214 4.69252 4.67297 4.65349 4.61472	4.2147 - 2 4.2005 4.1864 4.1723 4.1582 4.1482 4.1302 5.1163 4.1024 4.0885	5.5112 - 1 5.4927 5.4752 5.4758 5.4374 5.4108 5.4108 5.3826 5.3826 5.3862
20000 20100 20200 20300 20400 20500 20400 20700 20800 20900	20019 20119 20220 20320 20420 20520 20520 20721 20821 20921	447.347 446.990 446.634 446.277 445.564 445.564 445.850 444.894 444.137	-12-323 -12-680 -13-036 -13-373 -13-750 -14-106 -14-463 -14-863 -15-176 -15-533	-24.624 -24.822 -25.020 -25.416 -25.615 -25.611 -26.011 -26.209 -26.407	3.65632 2 4.63685 5.61743 4.57881 4.57881 4.557805 4.55045 4.52137 4.50235 4.48340	1.37501 + 1 1.36926 1.36353 1.35782 1.35212 1.35212 1.34645 1.34079 1.33516 1.32954 1.32395	4.57543 - 1. 4.57621 4.55705 4.553796 4.553896 4.48108 4.48108 4.48347 4.42477	4.07%6 - 2 4.060% 4.0471 4.0333 4.0196 4.0060 3.9923 3.9923 3.9952 3.99517	5.3281 - 1 5.3101 5.2921 5.2741 5.2562 5.2863 5.2027 5.1850 5.1673
21000 21100 21200 21300 21400 21400 21500 21600 21600	21021 21122 21222 21322 21422 21522 21522 21623 21623	443.781 443.424 443.067 442.711 442.354 441.641 441.628 441.641 441.628 440.571	-15.889 -16.286 -16.803 -16.953 -17.316 -17.672 -18.386 -18.742 -19.099	-26.605 -26.803 -27.201 -27.396 -27.596 -27.792 -27.792 -28.388	4.46451 + 2 4.44562 4.42692 4.40823 4.38960 4.37103 4.35253 4.33509 4.31571 4.29739	1.31837 + 1. 1.31281. 1.30727 1.30727 1.30175 1.29025 1.29025 1.28530 1.27985 1.27483 1.26902	4.40613 - 1 4.38755 4.36904 4.35958 4.35250 4.31387 4.29561 4.27741 4.25927 4.24120	3.9382 - 2 3.9287 3.9713 3.8979 3.88713 3.8580 3.8580 3.8316 3.8316 3.8316	5.1997 - 1 5.1925 5.1946 5.0792 5.0792 5.0826 5.08275 5.0930
22000 22100 22100 22300 22300 22500 22500 22700 22800 22900	2224 2224 22224 22235 2225 2225 2225 222	40.214 439.858 439.501 439.145 439.788 438.788 438.075 437.718 437.362 437.005	-19.456 -19.812 -20.525 -20.525 -21.239 -21.595 -21.952 -22.308 -22.665	-28.586 -28.785 -28.983 -29.181 -29.577 -29.775 -29.775 -30.171 -30.369	4.27914 + 2 4.26096 4.26096 4.22477 4.20677 4.18683 4.17095 4.15314 4.13538 4.11769	1.26363 + 1 1.25826 1.25291 1.24757 1.24226 1.23666 1.23168 1.22168 1.22118 1.221595	4.22319 - 1 4.20524 8.18735 8.16752 4.15176 5.13805 8.11681 8.09883 9.08131 4.08384	3.8052 - 2 3.7921 3.7791 3.7550 3.7550 3.7550 3.7550 3.7271 3.71183 3.8086	h.9758 = 1 h.9587 h.9516 h.9576 h.8906 h.8937 h.8339 h.8333
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TABLE IV.—Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS

AIIII	ude	Temperature			Pressure			Density		
Z, ft	H, ft	T, °R.	↑,°F	t,°C	P, mb	P, in Hg	P _o	ρ, lb ft ⁻³	Po	
15000 15100 15100 15200 15300 15400 15500 15600 15700 15800	14989 15089 15189 15189 15389 15488 15688 15788 1588	465.216 464.860 464.504 464.148 563.792 463.436 463.079 462.723 462.367 462.367	5.546 5.190 4.834 4.478 4.722 3.766 3.409 3.053 2.697 2.341	-14.697 -14.894 -15.092 -15.488 -15.686 -15.686 -16.081 -16.279 -16.477	5.72068 + 2 5.67770 5.67480 5.65197 5.62921 5.00654 5.58393 5.56140 5.533894 5.51656	1.68931 + 1 1.68253 1.67577 1.66903 1.66231 1.65561 1.44293 1.64228 1.63565 1.62904	5.64587 - 1 5.62319 5.60059 5.57806 5.55560 5.53322 5.51091 5.48688 5.46651 5.44442	4.8137 - 2 4.7981 4.7825 4.7669 4.7513 4.7358 4.7358 4.7204 4.7049 4.6895 4.6742	6.2946 - 6.2741 6.2537 6.2333 6.2130 6.1927 6.1725 6.1523 6.1322 6.1121	
16000 16100 16200 16300 16400 16500 16600 16700 16900	15988 16088 16187 16287 16387 16487 16587 16687 16786	461.655 461.299 460.943; 460.231; 459.875; 459.519 459;163; 458;807 458;451	1.985 1.629 1.273 0.917 0.561 0.205 -0.151 -0.507 -0.863 -1.219	-16.675 -16.873 -17.071 -17.268 -17.466 -17.664 -17.664 -18.060 -18.257 -18.455	5.49k25 + 2 5.47202 5.4985 5.42776 5.405775 5.38380 5.36193 5.31840 5.29675	1.52245 + 1 1-61589 1.60934 1.60282 1.59632 1.59694 1.58338 1.57694 1.57052 1.56413	5.42241 - 1 5.40046 5.37859 5.355.79 5.35506 5.31340 5.29181 5.27030 5.24885 5.22748	4.6589 - 2 4.6436 4.6284 4.6132 4.5980 4.5829 4.5678 4.5528 4.5378	6.0921 - 6.0721 6.0522 6.0323 6.0125 5.9927 5.9730 5.9533 5.9337	
17000 17100 17200 17300 17400 17500 17600 17700 17900	16986 17086 17186 17286 17385 17485 17585 17685 17685	458.095 457.730 457.327 457.027 456.671 456.315 455.962 455.462 455.246 454.890	-1.575 -1.931 -2.287 -2.643 -2.999 -3.355 -3.711 -4.068 -4.424 -4.780	-18.653 -18.851 -19.049 -19.444 -19.642 -19.638 -20.235 -20.433	5.27516 + 2 5.25365 5.23221 5.21084 5.16831 5.16831 5.14715 5.14715 5.10505 5.10505 5.08410	1.55775 + 1 1.55180 1.551807 1.53876 1.53247 1.53240 1.51373 1.51373 1.50752	5.20618 - 1 5.18495 5.18379 5.14270 5.12168 5.10072 5.007984 5.005903 5.03829 5.01761	4.5079 - 2 4.4950 4.4781 4.4633 4.4885 4.4338 4.4191 4.4044 4.3898 4.3752	5.8946 - 5.8751 5.8557 5.8363 5.8170 5.7977 5.7785 5.7593 5.7402 5.7211	
18000 18100 18200 18300 18400 18500 18600 18700 18800 18900	17984 18084 18184 18384 18384 18483 18683 18783 18783	454.534 454.178 453.822 453.410 452.755 452.399 452.043 451.687 451.331	+5.136 +5.492, +5.848 -6.559 +6.559 -6.915 -7.271 -7.627 -7.983 -8.339	-20.631 -20.829 -21.026 -21.422 -21.620 -21.620 -21.615 -22.213 -22.411	5.04322 + 2 5.04241 5.02167 5.00100 4.98040 4.95967 4.93941 4.91902 4.89869 4.87843	1.49517 + 1 1.48902 1.48290 1.47630 1.47630 1.46465 1.45861 1.45881 1.4558	4.99701 - 1 4.97647 4.95561 4.93561 4.91528 4.89301 4.87462 4.85463 4.83463 4.81464	4.3606 - 2 4.3461 4.3316 4.3172 4.3028 4.2884 4.2741 4.2598 4.2598 4.2455 4.2313	5.7021 - 5.6831 5.6642 5.6453 5.6265 5.6077 5.5889 5.5702 5.5516 5.5330	
19000 19100 19200 19300 19400 19500 19600 19700 19800 19700	18983 19083 19182 19282 19382 19582 19582 19681 19781	150.975 150.619 150.263 149.955 149.551 149.195 148.183 148.127 147.771	-8.695 -9.051 -9.407 -9.763 -10.119 -10.475 -10.831 -11.187 -11.543 -11.899	-22.804 -23.004 -23.400 -23.597 -23.597 -23.993 -24.388	4.85825 + 2 4.858127 4.858807 4.77817 4.778852 4.778853 4.778853 4.67958	1-43464 + 1 1-42870 1-42877 1-41687 1-41687 1-41687 1-41697 1-39347 1-39347 1-38188	h.79472 - 1 h.77486 h.75507 h.7353h h.71568 h.69609 h.67657 h.65711 h.63771 h.61839	4.2171 - 2 4.2050 4.1889 4.1748 4.1608 4.1468 4.1328 4.1189 4.1050 4.0011	5.5144 - 5.4959 5.4775 5.4207 5.4224 5.4042 5.3859 5.3497	
20000 20100 20200 20200 20400 20500 20600 20700 20900 20900	19981 20081 20180 20280 20380 20480 20580 20579 20779	447.415 447.059 446.703 446.397 245.436 445.436 446.924 446.924	-12-255 -12-611 -12-967 -13-323 -13-679 -14-034 -14-390 -14-746 -15-102 -15-458	-24.584 -24.784 -25.177 -25.177 -25.575 -25.775 -25.976 -26.366	4.66006 + 2 4.64061 4.62122 \ 4.60190 4.56265 4.56346 4.54484 4.52528 4.50289 4.48736	1.37612 + 1 1.37037 1.36465 1.35894 1.35326 1.34759 1.34194 1.33631 1.33631 1.33071	4.59912 - 1 4.57993 4.56173 4.52272 4.50379 4.46410 4.46410 4.42868	4.0773 - 2 4.0635 4.0497 4.0360 4.0224 4.0087 3.9951 3.9955 3.9860 3.9565	5.3516 - 5.3135 5.2956 5.2776 5.2597 5.2419 5.2241 5.2064 5.1887 5.1710	
21000 21100 21200 21300 21300 21400 21500 21600 21700 21900	20079 21178 21278 21378 21378 21378 21577 21677 21777	43.850 43.500 43.144 412.788 442.432 442.077 441.721 441.365 441.009 440.653	-15.814 -16.170 -16.526 -16.882 -17.593 -17.593 -17.649 -18.305 -18.661 -19.017	-26.563 -26.959 -27.351 -27.552 -27.552 -27.907 -28.343	H. NOBRO + 2 N. NOBRO N. N. 1006 N. N. 1229 N. 39368 N. 3751N N. 35666 N. 3362N N. 31989 N. 30160	1.31955 + 1 1.31399 1.30846 1.30295 1.29745 1.29198 1.28552 1.28108 1.27546 1.27024	N. 41006 - 1 N. 39151 N. 37502 N. 35459 N. 35452 N. 31792 N. 28151 N. 28151 N. 28151 N. 28535	3.9410 - 2 3.9276 3.91%2 3.9008 3.8875 3.8875 3.8610 3.8877 3.8847 3.88214	5.1534 5.1358 5.1183 5.1088 5.0834 5.0860 5.087 5.0314 5.0142 4.9970	
22000 22100 22200 22300 22400 22500 22600 22000 22900	21977 22077 22176 22276 22376 22376 22576 22576 22675 22675	N.O. 297 N.O. 297 N.O. 205 N.O. ~19.373 -19.729 -20.085 -20.796 -21.152 -21.508 -21.864 -22.220 -22.375	28.538 -28.738 -28.734 -29.331 -29.527 -29.527 -30.320	h.26337 + 2 b.26520 b.24770 h.21709 h.21709 h.19317 h.17532 h.15753 h.12213	1.26488 + 1 1.25951 1.25417 1.24884 1.24353 1.23824 1.23297 1.22772 1.22772 1.227726	1.22736 - 1 1.20943 4.19156 4.17374 4.15402 4.13834 5.12072 4.10316 4.00823	3.8083 - 2 3.7952 3.7622 3.7601 3.7562 3.7432 3.7174 3.7174 3.6918	4.9627 4.9627 4.9457 4.9286 4.9117 4.8610 4.8610 4.842 4.8275		

TABLE IV.—Continued

GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

				TENTIAL	ALTHOUE,	ENGLISH ()NI 1.5		
Altit	udė	Т	emperatur	è		Pressure	g	Den	sity
H, ff	Ž, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	P P°	ρ, lb ft ⁻³	<u>ρ</u> Ρ _ο
23000 23100 23200 23300 23500 23500 23600 23700 23800 23900	23025 23126 23226 23326 23426 23527 23627 23727 23827 23927	436.648 436.292 435.935 435.578 435.222 434.865 434.509 434.152 433.795 433.439	-23.022 -23.378 -23.735 -24.092 -24.486 -24.805 -25.161 -25.518 -25.875 -26.231	-30.568 -30.766 -30.964 -31.162 -31.360 -31.558 -31.756 -31.954 -32.153 -32.351	4.10006 + 2 4.08249 4.06498 4.04754 4.03015 4.03015 4.01282 3.99556 3.97835 3.96121 3.94412	1.21075 + 1 1.20556 1.20039 1.19524 1.19010 1.18499 1.17481 1.7481 1.16974 1.16470	4.04645 - 1 4.02911 4.01183 3.994/1 3.96035 3.96035 3.94331 3.92633 3.90941 3.89255	3.6758 - 2 3.6630 3.6503 3.6576 3.6123 3.5123 3.5997 3.5872 3.5746 3.5622	4.8065 - 1 4.7899 4.7732 4.7566 4.7401 4.7236 4.7071 4.6907 4.6743 4.6580
24000 24100 24200 24300 24500 24500 24600 24700 24800 24900	24028 24128 24228 24328 24329 24429 24629 24729 24830 24930	432.726 432.726 432.369 432.012 431.656 431.299 430.586 430.229 429.873	-26.588 -26.944 -27.301 -27.658 -28.014 -28.371 -28.728 -29.084 -29.441 -29.797	-32.549 -32.747 -32.945 -33.143 -33.539 -33.738 -33.936 -34.134 -34.332	3.92710 + 2 3.91013 3.89322 3.87637 3.85959 3.85959 3.82619 3.80957 3.79302 3.77652	1.15967 + 1 1.15466 1.14967 1.14469 1.13974 1.13480 1.12987 1.12497 1.12497 1.121008	3.87.574 - 1 3.85900 3.84231 3.82568 5.80912 3.79260 3.77615 3.75976 3.74342 3.72714	3.5497 - 2 3.5373 3.5249 3.5125 3.5002 3.4879 3.4757 3.4634 3.4512 3.4391	4.6417 — 1 4.6258 4.6092 4.5931 4.5770 4.5609 4.5189 4.5129 4.4970
25000 25100 25200 25300 25300 25500 25600 25700 25800 25900	25030 25130 25230 25331 25431 25531 25631 25631 25632 25632 25932	429.516 429.159 428.803 428.46 428.090 427.733 427.376 427.020 426.663 426.306	-30.154 -30.511 -30.867 -31.224 -31.580 -31.937 -32.294 -32.650 -33.007 -33.364	-34.530 -34.728 -35.124 -35.322 -35.521 -35.719 -35.917 -36.115 -36.313	3.76009 + 2 3.74371 3.72739 3.71112 3.69492 3.67877 3.66267 3.646644 3.63066 3.61474	1.11035 + 1 1.10552 1.10070 1.09589 1.09111 1.08634 Tw08159 1.07685 1.07213	3.71092 - 1 3.69475 3.67864 3.66259 3.64660 3.63066 3.63066 3.61478 3.59895 3.58319 3.56747	3.4270 - 2 3.4149 3.4026 3.3908 3.3788 3.3668 3.3549 3.3430 3.3311 3.3193	4.4654 4.4654 4.4456 4.4339 4.4182 4.4025 4.3669 4.3714 4.3559 4.3804
26000 26100 26200 26300 26400 26500 26600 26700 26700 26900	26032 26133 26233 26333 26433 26534 26534 26634 26734 26834 26935	425.950 425.593 425.237 424.880 424.523 424.167 423.610 423.658 423.097 423.740	-33.720 -34.077 -34.433 -34.790 -35.147 -35.503 -35.860 -36.216 -36.573 -36.930	-36.511 -36.709 -36.907 -37.106 -37.304 -37.502 -37.700 -37.898 -38.096 -38.294	3.59888 + 2 3.58307 3.56732 3.55162 3.53598 3.52080 3.52080 3.52080 3.47398 3.47398 3.47398	1.06275 + 1 1.05808 1.05343 1.04879 1.04417 1.03957 1.03042 1.03042 1.02587	3.55181 - 1. 3.53621 3.52067 3.50518 3.48974 3.47436 3.475904 3.44377 3.42855 3.41339	3.3075 - 2 3.2957 3.2840 3.2723 3.2606 3.2490 3.2374 3.2258 3.2142 3.2027	4.3250 - 1 8.3096. 8.2982 4.2789 8.2637 8.2488 8.2333 4.2181 4.2030 4.1880
27000 27100 27200 27300 27300 27500 27500 27600 27700 27800 27900	27035 27135 27236 27336 27336 27536 27537 27737 27837 27837	422.384 422.027 421.670 421.314 420.957 420.601 420.244 419.387 419.531 419.174	-37.286 -37.643 -38.300 -38.356 -38.713 -39.069 -39.426 -39.783 -40.139 -40.496	-38.492 -38.691 -38.889 -39.087 -39.285 -39.483 -39.681 -39.879 -40.077 -40.275	3.44331 + 2 3.42806 3.41286 3.39772 3.38263 3.36759 3.35261 3.33769 3.32281 3.30800	1.01681 + 1 1.01230 1.00762 1.00335 9.98889 + 0 9.94450 9.99026 9.85619 9.81227 9.76851	3.39828 - 1 5.38323 3.36823 5.35329 3.32356 3.32356 3.30877 3.29808 3.27936 3.26474	3.1912 - 2 3.1798 3.1684 3.1570 3.1456 3.1343 3.1230 3.1117 3.1005 3.0893	4.1730 - 1 4.1580 4.1430 4.1282 4.1133 4.0985 4.0837 4.0690 4.0543.
28000 28100 28200 28300 28400 28500 28700 28700 28800 28900	28038 28138 28238 28338 28338 28439 28539 28639 28740 28840 28940	418.818 418.461 418.104 417.748 417.391 417.034 416.678 416.321 416.321 416.608	-40.852 -41.209 -41.566 -41.922 -42.279 -42.636 -42.992 -43.349 -43.705 -44.002	-40.474 -40.672 -40.870 -41.068 -41.266 -41.464 -41.860 -42.059 -42.257	3.29323 + 2 3.27852 3.26386 3.24926 3.23470 3.22021 3.20576 3.19136 3.17702 3.16273	9.72491 + 0 9.68147 9.63818 9.59505 9.55208 9.50926 9.46660 9.42410 9.38174 9.33955	3.25017 - 1: 3.23565 3.22118 3.20677 3.19241 3.17810 3.16384 3.14963 3.13548 3.12138	3.0781 - 2 3.0670 3.0559 3.0448 5.0338 3.0227 3.0118 3.0008 2.9899 2.9790	4.0251 - 1. 4.0105 3.9960 3.9815 3.9870 3.9526 3.9383 3.9239 3.9239 3.9097
29000 29100 29200 29300 29400 29500 29600 29700 29800 29900	29040 29141 29241 29341 29442 29542 29742 29742 29843 29843	415.251 414.895 414.538 414.182 413.825 413.468 413.112 412.755 412.398 412.042	- 44 - 419 - 44 - 775 - 45 - 132 - 45 - 645 - 46 - 202 - 46 - 558 - 46 - 915 - 47 - 628	-42.455 -42.653 -42.653 -42.651 -43.049 -43.247 -43.644 -43.644 -43.640 -44.040	3.14850 + 2 3.13431 3.12018 3.10609 3.09206 3.07808 3.06416 3.05028 3.03645 3.03645	9.29750 + 0 9.25561 9.21388 9.17229 9.13086 9.08958 9.0885 9.00747 8.96665	3.10732 - 1 3.09332 3.07937 3.06548 3.05163 3.03783 3.03783 3.02409 3.01039 2.99675 2.98315	2.9681 - 2 2.9573 2.9465 2.9457 2.9250 2.9183 2.9036 2.8929 2.8823 2.8717	3.8812 - 1 3.8670 3.8529 3.8388 3.8248 3.8108 3.7968 3.7629 3.7690 3.7551
30000 30100 30200 30300 30400 30500 30600 30600 30800 30900	30043 30144 30244 30344 30545 30545 30745 30846 30946	411.685 411.329 410.972 410.615 410.259 409.902 409.545 409.189 408.832 408.476	-47.985 -48.341 -48.698 -49.055 -49.411 -49.768 -50.124 -50.838 -51.194	- 44.436 44.634 - 44.632 - 45.030 - 45.228 - 45.427 - 45.625 - 45.623 - 46.021	3.00895 + 2 2.99528 2.98166 2.96308 2.95456 2.94109 2.92766 2.91429 2.90096 2.88769	8.88544 + 0 8.84506 8.80483 8.76475 8.72481 8.68502 8.64539 8.60589 8.50554 8.52734	2.96961 - 1 2.95611 2.94267 2.92927 2.91592 2.90263 2.88938 2.87618 2.86303 2.84993	2.8611 - 2 2.8506 2.8401 2.8296 2.8192 2.8088 2.7784 2.7880 2.7777 2.7674	3.7413 - 1 3.7275 3.7138 3.7001 3.6865 3.6728 3.6728 3.6553 3.6457 3.6322 3.6188
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TABLE IX.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altitude Temperat		Temperat `			Pressure:		Den	sity	
Z, ft	Н, f1	T, °R	t,ºF	t,°C	P, mb	P, in Hg	P P	ρ, lb ft ⁻³	<u>ρ</u> <u>ρ</u>
23000 23100 23200 23300 23400 23500 23600 23700 23800 23900	22975 23074 23174 23274 23374 23573 23573 23573 23673 23773	436.739 436.383 436.027 435.671 435.315 434.960 434.604 434.248 433.892 433.536	-22.931 -23.287 -23.643 -23.999 -24.355 -24.710 -25.066 -25.422 -25.778 -26.134	-30.517 -30.715 -30.715 -31.110 -31.308 -31.506 -31.703 -31.901 -32.099 -32.296	5.10452 + 2 4.08698 4.08049 4.03207 4.03470 4.01740 4.00016 3.98298 3.98298 3.98285 3.94879	1v21206 + 1: 1.2048 + 1: 1.20172 1.19657 1.19185 1.18634 1.18125 1.17617 1.17.112	4.05085 - 1 4.03353 4.01628 3.9908 3.98194 3.98485 3.93087 3.91399 3.91399 3.89715	3.6790 - 2 3.6663 3.6536 3.6409 3.6283 3.6156 3.6031 3.5905 3.5780 3.5656	4-8108 - 1 4-7941 4-7775 4-7609 4-7444 4-7279 4-7115 4-6951 4-6787 4-6624
24000 24100 24200 24300 24500 24500 24600 24700 24800 24900	23972 24072 24172 24172 24272 24371 24571 24571 24771 24870	433.181 432.825 432.469 432.113 431.757 431.402 431.046 430.690 430.334	-26.489 -26.845 -27.201 -27.557 -27.913 -28.268 -28.624 -28.980 -29.336 -29.691	-32.494 -32.692 -32.887 -33.285 -33.482 -33.676 -33.676 -34.075 -34.273	3.93179 + 2 3.91484 3.89796 3.88113 3.86437 3.84766 3.83101 3.81442 3.79789 3.79789	1.16106 + 1 1.15605 1.15107 1.15107 1.14115 1.14115 1.13621 1.13130 1.12640 1.12152	3.88037 - 1 3.86365 3.84699 3.83038 3.81383 3.79735 3.78091 3.76454 3.74823 3.73197	3.5531 - 2 3.5407 3.5284 3.5160 3.5037 3.4792 3.4670 3.4548 3.4427	4.6462 - 1 4.6300 4.5138 4.516 4.5655 4.5655 4.5176 4.5176
25000 25100 25200 25300 25500 25500 25600 25700 25800 25900	24970 25070 25170 25170 25269 25369 25469 25668 25768 25768	429.623 429.267 428.911 428.955 428.200 427.844 427.488 427.132 426.777 426.421	-30.047 -30.403 -30.759 -31.115 -31.470 -31.826 -32.182 -32.538 -32.893 -33.249	-34.471 -34.668 -35.064 -35.261 -35.459 -35.657 -35.654 -36.052 -36.249	3.76500 + 2 3.74864: 3.73234 5.71610 3.669992 3.68379 3.66772 5.65171 3.63575 3.61985	1.11180 + 1 1.10697 1.10216 1.09736 1.09259 1.08782 1.08308 1.07835 1.07835 1.07364 1.06894	3.71577 - 1 5:69962: 3.68354 3:60751 3:65153 3:63562 3:61976 3:60395 3:58821 3:57251	3.4306 - 2 3.4185 3.4965 3.3945 3.3825 3.3705 3.3586 3.3467 3.3349 3.3231	4.4859 - 1 4.4707 4.4584 4.4387 4.4230 4.4074 4.3718 4.3763 4.3608 4.3454
26000 26100 26200 26300 26400 26500 26700 26700 26800 20900	25968 26067 26167 26267 26367 26466 26566 26766 26766 26865	426.065 425.710 425.35h 424.998 424.642 424.287 423.931 423.575 423.220 422.864	-33.605 -33.960 -34.316 -34.316 -35.028 -35.028 -35.739 -36.095 -36.450 -36.806	-36.447 -36.645 -36.842 -37.040 -37.238 -37.435 -37.435 -37.830 -37.830	3.60k01 + 2 3.58822 3.572k9 3.55681 3.55119 3.52563 3.51012 3.49k67 3.47928 3.46393	1.06426 + 1 1.05960 1.05933 1.04571 1.04571 1.04112 1.03654 1.03198 1.02743	3.55688 - 1 3.54130 3.52577 3.51030 3.49489 3.47953 3.46422 3.44897 3.43378 3.41864	3.3113 - 2 3.2996 3.2878 3.2762 3.2585 3.2589 3.2413 3.2297 3.2182 3.2067	+.3300 - 1 +.3146 +.2993 +.2840 +.2686 +.2536 +.2384 +.2233 +.2082 +.1932
27000 27100 27200 27300 27500 27500 27600 27700 27800 27900	26965 27065 27165 27165 27264 27364 27464 27564 27663 27763 27763	422.508 422.152 421.797 421.441 421.085 420.730 420.374 420.018 419.663 419.307	-37.162 -37.518 -37.873 -38.229 -38.585 -38.940 -39.296 -39.652 -40.007 -40.363	-38.423 -38.621 -38.618 -39.016 -39.214 -39.411 -39.609 -40.004 -40.004	3.44665 + 2 3.43341 3.40311 3.40311 3.38865 3.37303 3.37307 3.34317 3.32831 3.31351	1.01838 + 1 1.01389 1.00941 1.00049 1.00049 9.94056 + 0 9.91638 9.87236 9.87236 9.82850 9.78480	3.40355 - 1 3.38852 3.37354 3.3735861 3.35361 3.31416 3.29945 3.28479 3.27018	3.1952 - 2 3.1838 3.1724 3.1610 3.1497 3.1384 3.1271 3.1159 3.1047 3.0935	4-1782 - 1 4-1632: 4-1483 4-1335 4-1186 4-1039 4-0891 4-0744 4-0597 4-0451
28000 28100 28200 28300 28400 28500 28600 28700 28600 28700	27962 28062 28162 28262 28361 28461 28561 28760 28860	418.951 418.596 418.240 417.884 417.173 416.818 416.462 416.106 415.751	-40.719 -41.074 -41.430 -41.786 -42.141 -42.497 -42.852 -53.208 -53.554 -43.519	-40.399 -40.597 -40.794 -40.992 -41.190 -41.387 -41.585 -41.782 -41.700	3.29877 + 2 3.28408 3.25445 3.25485 3.24032 3.22584 3.21141 3.19704 3.16844	9.74126 + 0 9.69788 9.65465 9.61157 9.56846 9.52590 9.48329 9.44084 9.39855 9.35641	3.25563 - 1 3.24113 3.22668 3.21227 3.19705 3.18366 3.16992 3.15523 3.14109 3.12701	3.0823 - 2 3.0712 3.0601 3.0491 3.0380 3.0270 3.0161 3.0051 2.9992 2.9833	4.0305 - 1 4.0160 4.0015 3.9870 3.9726 3.9582 3.9439 3.9296 3.9153 3.9011
29000 29100 29200 29300 29400 29500 29600 29600 29800 29800	28960 29059 29159 29259 29359 29458 29558 29558 29757 29857	h15.395 h15.039 h14.684 h14.328 h13.972 h13.617 h13.261 h12.906 h12.550 h12.19h	-44.275 -44.631 -44.986 -45.342 -45.697 -46.053 -46.409 -47.120 -47.476	-42.375 -42.573 -42.573 -42.770 -42.968 -43.165 -43.363 -43.560 -43.756 -43.756	3.15422 + 2 3.14006 3.12594 3.11188 3.09787 3.08390 3.06099 3.06099 3.05614 3.04233 3.02857	9.31%42 + 0 9.27258 9.23090 9.18937 9.18799 9.10677 9.02%76 8.98339 8.94336	3.11298 - 1 3.09899 3.08506 3.07118 3.05736 3.04358 3.02985 3.01617 3.00254 2.98897	2.9725 - 2 2.9617 2.9509 2.9401 2.9294 2.9187 2.9081 2.8974 2.8868 2.8762	3.8669 - 1 3.8728 3.8587 3.6546 3.8306 3.8166 3.8027 3.7888 3.7749 3.7611
30000 30100 30200 30300 30400 30500 30700 30700 30700	29957 30057 30156 30256 30356 30455 30555 30655 30655 30655	411.839 411.128 410.772 410.417 410.061 409.705 409.350 408.994 408.639	-47.831 -48.187 -48.542 -48.898 -49.253 -49.409 -49.965 -50.320 -50.676 -51.031	hh . 351 hh . 546 hh . 746 hh . 943 45 . 141 h5 . 536 h5 . 533 h5 . 733 h5 . 128	3.01486 + 2 3.00121 2.98760 2.97404 2.94054 2.94708 2.93364 2.92032 2.90701 2.89375	8.90289 + 0 8.86256 8.82238 8.78235 8.78247 8.70273 8.66314 8.62370 8.58440 8.54525	2.97544 - 1 2.96196 2.94853 2.93515 2.92182 2.90854 2.89531 2.88213 2.86900 2.65591	2.8657 - 2 2.8552 2.6847 2.8342 2.8238 2.8134 2.8030 2.7927 2.7824 2.7721	3.7473 - 1 3.7335 3.7198 3.7061 3.6925 3.6789 3.6538 3.6518 3.6383 3.6383

TABLE IV.—Continued

GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude	Т	emperatur	e i		Pressure		Den	sity
H, ft	Z, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	P ₀	ρ, lb ft ⁻¹	$\frac{\rho}{\rho_{\rm o}}$
31000 31100 31200 31300 31400 31500 31600 31600 31800 31900	31046 31146 31247 31347 31347 31546 31648 31748 31849 31949	#08.119 #07.762 #07.406 #07.049 #06.693 #06.336 #05.979 #05.623 #05.266	-51.551 -51.908 -52.264 -52.977 -53.334 -53.691 -54.404 -54.761	-46.417 -46.615 -46.613 -47.210 -47.408 -47.606 -47.804 -48.002 -48.200	2.87446 + 2 2.86129 2.84816 2.83508 2.82205 2.80907 2.79613 2.78325 2.77041 2.75762	8.48829 + 0 8.4928 8.41061 8.37199 8.33351 8.29517 8.25698 8.21893 8.18102 8.14326	2.83687 - 1 2.62387 2.81091 2.79801 2.78515 2.77233 2.75957 2.74685 2.73418 2.72156	2.7571 - 2 2.7467 2.7367 2.7365 2.7164 2.7062 2.6961 2.6861 2.6760 2.6660	3.6053 3.5718 3.57186 3.5553 3.5520 3.5388 3.5256 3.7124 3.4993 3.4862
32000 32100 32200 32300 32400 32500 32600 32700 32800 32900	32049 32149 32250 32350 32450 32451 32651 32751 32852 32852	404.553 404.196 403.840 403.833 403.126 402.770 402.413 402.057 401.700 401.343	-55.117 -55.474 -55.830 -56.544 -56.900 -57.257 -57.970 -58.327	-48.398 -48.597 -48.795 -48.795 -48.993 -49.389 -49.587 -49.587 -49.983 -50.181	2.74488 + 2 2.73219 2.71954 2.70694 2.69439 2.68189 2.66943 2.65702 2.64466 2.63234	8.10563 + 0 8.06815 8.03081 7.97360 7.975654 7.91961 7.88283 7.84618 7.80967 7.77330	2.70899 - 1 2.69646 2.68398 2.67155 2.65916 2.64682 2.63452 2.6228 2.61008 2.59792	2.6561 - 2 2.6461 2.6362 2.6263 2.6164 2.6066 2.5968 2.5870 2.5773 2.5675	3.4731 3.4601 3.4472 3.4342 3.4342 3.4213 3.4085 3.3756 3.3756 3.3828 3.3701
33000 33100 33200 33300 33500 33500 33600 33700 33800 33900	33052 33153 33253 33353 33454 33554 33654 33755 33855	400.987 400.630 400.273 399.917 399.560 399.204 398.847 398.134 397.777	-58.683 -59.040 -59.397 -59.753 -60.110 -60.466 -60.823 -61.180 -61.536	-50.380 -50.578 -50.776 -50.974 -51.172 -51.370 -51.568 -51.766 -51.965 -52.163	2.62007 + 2 2.60785 2.59567 2.58354 2.57145 2.557941 2.54742 2.53547 2.52357 2.51171	7.73707 + 0 7.70097 7.66501 7.62919 7.559350 7.55794 7.52253 7.48724 7.45209 7.41708	2-58581 - 1 2-57375 2-56173 2-54975 2-53783 2-52594 2-51411 2-50232 2-49057 2-47887	2.5578 - 2 2.5482 2.5385 2.5289 2.5193 2.5098 2.5003 2.4908 2.4813 2.4718	3.3447 - 3.3321 3.3195 3.3069 3.2944 3.2819 3.2694 3.2570 3.2446 3.2322
34000 34100 34200 34300 34500 34500 34600 34700 34800 34900	34056 34156 34256 34357 34557 34658 34758 34758 34758	397.421 397.064 396.707 396.351 395.637 395.637 395.281 394.924 394.568 394.211	-62.249 -62.606 -62.963 -63.319 -63.676 -64.033 -64.389 -65.102 -65.459	-52.361 -52.559 -52.757 -52.753 -53.153 -53.351 -53.550 -53.748 -53.946 -54.144	2.49990 + 2 2.48813 2.47641 2.46473 2.45310 2.44151 2.42996 2.41846 2.40701 2.39559	7.38219 + 0 7.34744 7.31283 7.27834 7.24399 7.20977 7.17568 7.14172 7.10789 7.07419	2.46721 - 1 2.45559 2.44902 2.43250 2.42102 2.40958 2.39819 2.38684 2.37553 2.36427	2.4624 - 2 2.4530 2.4433 2.4433 2.4250 2.4157 2.4065 2.3973 2.3881 2.3789	3.2199 - 3.2077 3.1954 3.1832 3.1710 3.1589 3.1347 3.1227 3.1107
35000 35200 35400 35600 35800 36000 36200 36400 36600 36800	35059 35260 35460 35661 35862 36062 36263 36464 36664	393.85% 393.1%1 392.428 391.715 391.001 390.288 389.970 389.970 389.970	-65.816 -66.529 -67.242 -67.955 -68.669 -69.382 -69.700 -69.700 -69.700	-54.342 -54.738 -55.134 -55.927 -56.323 -56.500 -56.500 -56.500	2.38423 + 2 2.36162 2.33919 2.31693 2.29484 2.27293 2.25119 2.22965 2.20832 2.18719	7.04062 + 0 6.97386 6.90762 6.84189 6.77667 6.71195 6.64775 6.58415 6.52116 6.45878	2.35305 - 1 2.33074 2.30860 2.30863 2.26483 2.24320 2.22175 2.20049 2.17944 2.17944	2.3697 - 2 2.3515 2.3334 2.3154 2.2975 2.2798 2.2598 2.2588 2.2382 2.2168 2.1956	3.0987 - 3.0749 3.0513 3.0277 3.0043 2.9811 2.9550 2.9267 2.8987 2.8710
37000 37200 37400 37600 37800 38000 38200 38400 38600 38800	37066 37266 37467 37668 37869 38069 38270 38471 38672 38872	389.970 389.970 389.970 389.970 389.970 389.970 389.970 289.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	2.16627 + 2 2.14555 2.12502 2.10469 2.08456 2.06461 2.04486 2.02530 2.00592 1.98673	6.39699 + 0 6.33579 6.27518 6.21515 6.15569 6.09680 6.03847 5.98071 5.92349 5.86682	2.13794 - 1 2.11749 2.09723 2.09727 2.05730 2.03761 2.01812 1.99882 1.97969 1.96075	2.1746 - 2 2.1538 2.1332 2.1127 2.0925 2.0725 2.0527 2.0330 2.0136 1.9943	2.8435
39000 39200 39400 39600 39800 40000 40400 40600 40800	39073 39274 39475 39475 39876 40077 40278 40478 40479 40880	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.96773 + 2 1.94890 1.93026 1.91179 1.89350 1.87539 1.85745 1.83968 1.82208	5.81070 + 0 5.75511 5.70005 5.64552 5.59151 5.53802 5.48504 5.43257 5.38060 5.32912	1.94200 - 1 1.92342 1.90502 1.88679 1.886874 1.85086 1.83316 1.81562 1.79825 1.76105	1.9753 - 2 1.9754 1.9376 1.9191 1.9007 1.8826 1.8846 1.8867 1.8291	2.5829 - 1 2.5582 2.5337 2.5095 2.4855 2.4617 2.4831 2.4148 2.3917 2.3688
1000 17200 11400 11600 11600 12200 12200 12400 12600 12600	41081 41482 41483 41883 41885 42865 422486 422887 42888	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-49.700 -49.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.78738 + 2 1.77028 1.77028 1.75335 1.73657 1.71996 1.70351 1.68721 1.68721 1.65508 1.63925	5.2781% + 0 5.22765 5.17763 5.12810 5.0790% 5.03055 4.98233 4.93%66 4.887%6	1.76401 - 1 1.74713 1.73042 1.71387 1.71387 1.69747 1.68123 1.66515 1.66522 1.63344 1.61781	1.7942 - 2 1.7771 1.7601 1.7432 1.7265 1.7100 1.6937 1.6775 1.6614 1.6455	2.3462 - 1 2.3237 2.3015 2.2795 2.2577 2.2361 2.2147 2.1935 2.1725 2.1725
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TABLE IX .- Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	ude	т:.	emperatur	e		Pressure		. Den	sity
Z, ft	H, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	P Po	ρ, lb ft ⁻³	$\frac{\rho}{\rho_0}$
31000 31100 31200 31300 31400 31500 31600 31700	30954 31054 31153 31253 31353 31452 31552	408.283 407.928 407.572 407.216 406.861 406.505 406.150 405.794	-51.387 -51.742 -52.098 -52.454 -52.809 -53.165 -53.520 -53.876	-46.326 -46.524 -46.721 -46.717 -47.314 -47.511 -47.709	2.88054 + 2 2.86738 2.85427 2.84121 2.82820 2.81523 2.80231 2.78944	8.50624 + 0 8.46738 8.42866 8.37009 8.35166 8.31337 8.27522 8.23722	2.84288 - 1 2.82989 2.81695 2.80496 2.77121 2.77842 2.76567 2.75297	2.7619 - 2 2.7516 2.7415 2.7313 2.7212 2.7110 2.7010 2.6909	3.6115 - 3.5981 3.5848 3.5715 3.55750 3.5550 3.5519
31800 31900 32000	31752 31851 31951	405.439 405.083 404.728	-54.231 -54.587 -54.942	-47.906 -48.104 -48.301	2.77662 2.76385 2.75112 + 2	8.19936 8.16164 8.12406 + 0	2,74031 2,72771 2,74515 - 1	2.6809 2.6709 2.6610 - 2	3.5056 3.4926 3.4795 -
32100 32200 32300 32400 32500 32600 32700 32800 32900	32051 32150 32250 32350 32449 32549 32649 32748 32848	04.372 404.017 403.661 403.306 402.950 402.595 402.239 401.884 401.528	-55.298 -55.653 -56.009 -56.364 -56.720 -57.075 -57.431 -57.786 -58.142	-48.499 -48.696 -48.896 -49.091 -49.289 -49.486 -49.684 -49.881	2.73845 2.72581 2.71323 2.70070 2.68821 2.67576 2.66337 2.65102 2.63872	8-08663 8-04933 8-01217 7-97515 7-93827 7-90153 7-86493 7-82846 7-79213	2.7026k 2.69017 2.67775 2.66538 2.65305 2.64077 2.62854 2.61635 2.60421	2.6510 2.6411 2.6312 2.6214 2.6116 2.6018 2.5920 2.5823 2.5726	3.4665 3.4536 3.4407 3.4278 3.4150 3.4022 3.3894 3.3767 3.3640
33000 33100 33200 33300 33400 33500 33600 33700 33800 33900	32948 33048 33147 33247 33347 33546 33546 33646 33745 33845	401.173 400.817 400.462 400.106 399.751 399.395 399.040 398.684 398.329 397.973	-58.497 -58.853 -59.208 -59.564 -59.919 -60.275 -60.430 -61.341 -61.697	-50.276 -50.474 -50.671 -51.066 -51.264 -51.461 -51.659 -51.856 -52.054	2.62646 + 2 2.61425 2.60209 2.58997 2.57790 2.56588 2.55390 2.54196 2.53007 2.51823	7.75594 + 0 7.71989 7.68397 7.64819 7.61254 7.57703 7.54165 7.50641 7.47130 7.43633	2.59212 - 1 2.58007 2.56806 2.55611 2.54419 2.53232 2.52050 2.50872 2.49699 2.48530	2.5629 - 2 2.5532 2.5536 2.5340 2.5245 2.5149 2.5054 2.4959 2.4865 2.4770	3.3513 - 3.3387 3.3261 3.3136 3.3010 3.2886 3.2761 3.2637 3.2514 3.2390
34000 34100 34200 34300 34500 34500 34600 34700 34800 34900	33945 34044 34144 34244 34343 34543 34543 34542 34742 34742	397.618 397.262 396.907 396.552 396.196 395.841 395.485 395.130 394.419	-62.052 -62.408 -62.763 -63.118 -63.474 -63.829 -64.185 -64.580 -64.580	-52.251 -52.449 -52.646 -52.644 -53.039 -53.436 -53.633 -53.831 -54.028	2.50643 + 2 2.49468 2.48297 2.47130 2.45968 2.44811 2.433657 2.42509 2.41364 2.40224	7-40148 + 0 7-36677 7-33220 7-29775 7-26343 7-22925 7-19520 7-16128 7-12748 7-09382	2-47365 - 1 2-45205 2-45050 2-45050 2-43898 2-42752 2-41609 2-40471 2-39337 2-38208 2-37083	2.4676 - 2 2.4583 2.4489 2.4396 2.4303 2.4210 2.4118 2.4026 2.3934 2.3982	3.2267 - 3.2145 3.2023 3.1901 3.1779 3.1658 3.1537 3.1417 3.1297
35000 35200 35400 35400 35800 36000 36200 36400 36600 36800	34941 35340 35359 35739 35739 36137 36137 36536 36735	394.064 393.353 392.642 391.931 391.220 390.509 389.970 389.970 389.970	-65.606 -66.317 -67.028 -67.739 -68.450 -69.161 -69.700 -69.700 -69.700	-54.226 -54.621 -55.016 -55.411 -55.405 -56.200 -56.500 -56.500 -56.500	2.39089 + 2 2.36831 2.38590 2.32366 2.30160 2.27971 2.25798 2.23646 2.21514 2.19402	7.06029 ÷ 0 6.99361 6.92744 6.86178 6.79662 6.73197 6.66782 6.60425 6.54129 6.47893	2.35962 = 1 2.3373k 2.31522 2.29328 2.27150 2.24990 2.22846 2.20721 2.18617 2.16533	2.3751 - 2 2.3559 2.3389 2.3209 2.3030 2.2853 2.2866 2.2450 2.2236 2.2236	3.1058 - 3.0820 3.0584 3.0349 3.0115 2.9883 2.9639 2.9356 2.9077 2.8799
37000 37200 37400 37600 37800 38200 38200 38400 38600 38800	36934 37:134 37:333 37532 37732 37931 38130 38329 38529 38728	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	2.17310 + 2 2.15239 2.13187 2.11155 2.09142 2.07148 2.05174 2.03218 2.01281 1.99363	6.41717 + 0 6.35600 6.29541 6.23540 6.17596 6.11709 6.05878 6.00103 5.94363 5.88718	2.14467 - 1 2.12424 2.10399 2.08394 2.06407 2.04440 2.02491 2.00561 1.98649	2.1814 - 2 2.1606 2.1400 2.1196 2.0994 2.0794 2.0596 2.0400 2.0205 2.0013	2.8525 - 2.8253 2.7984 2.7717 2.7453 2.7191 2.6932 2.6675 2.66421 2.6169
39000 39200 39400 39400 39600 40000 40200 40400 40400 40400	38927 39126 39326 39525 39724 39923 40123 40322 40521 40720	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.97%63 + 2 1.95580 1.93716 1.91870 1.90042 1.88230 1.86457 1.8%60 1.82900	5.83107 + 0 5.77549 5.72044 5.66592 5.61193 5.55844 5.50547 5.45300 5.40104 5.34957	1.94880 - 1 1.93023 1.91183 1.89361 1.887556 1.85769 1.83999 1.82245 1.80508	1.9822 - 2 1.9633 1.9446 1.9260 1.9077 1.8895 1.8715 1.8537 1.8530 1.8185	2.5920 - 2.5673 2.5828 2.5186 2.4945 2.4708 2.4472 2.4239 2.4008 2.3779
\$1000 \$1200 \$1400 \$1600 \$1800 \$2000 \$2200 \$2400 \$2400 \$2800	40920 41119 41318 41517 41716 41916 42115 42314 42513 42712	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.79431 + 2 1.77721 1.76027 1.74350 1.72689 1.71043 1.69414 7.67799 1.36201 1.64617	5.29859 + 0 5.29810 5.19809 5.14856 5.09950 5.05001 5.00278 4.95511 4.90790 4.86114	1.77:284 - 1 1.75:397 1.73:726 1.72:070 1.70:431 1.68:807 1.67:198 1.65:605 1.65:605 1.64:64	1.8012 - 2 1.7840 1.7670 1.7502 1.7535 1.7170 1.7006 1.6844 1.6684	2.3553 - 2.3328 2.3106 2.2886 2.2668 2.2452 2.2238 2.2238 2.1816 2.1608
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TABLE IV.—Continued

GEOPOTENTIAL ALTITUDE, ÉNGLISH UNITS

	ude ;	. т	emperatur	e	<u>.</u>	Pressure		Den	sity
H, ft	Z, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	<u>P.</u> P.	ρ, lb ft ⁻³	<u>ρ</u> Ρ _ο
43000 43200 43400 43600 43600 44000 44000 44600	43089 43290 43491 43691 43692 45093 44294 44495 44696	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.62357 + 2 1.60803 1.59265 1.57741 1.56232 1.54738 1.53257 1.51791 1.50339 1.48901	4.79439 + 0 4.74852 4.76510 4.65810 4.65811 4.56941 4.52569 4.48240 4.43951 4.39704	1.60234 - 1 1.58701 1.57182 1.55679 1.54159 1.52714 1.51253 1.49806 1.48373 1.46954	1.6298 - 2 1.6142 1.5987 1.5835 1.5683 1.5533 1.55384 1.5237 1.5091	2.1311 ~ 2.1108 2.0906 2.0906 2.0508 2.0311 2.0117 1.9925 1.9734 1.9555
45000 45400 45400 45600 45600 46000 46400 46600 46800	45097 45298 45499 45700 45901 46102 46303 46704 46905	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.47476 + 2. 1.46086 1.44668 1.43284 1.41914 1.40556 1.37879 1.36560 1.35254	4-35498 + 0 4-31332 4-27205 4-23118 4-19070 4-15061 4-11091 4-07158 4-03263 3-99405	1.45548 - 1 1.44156 1.42776 1.41411 1.40058 1.38718 1.37391 1.36076 1.34775 1.33485	1.4804 - 2 1.4662 1.4522 1.4383. 1.4246 1.4109 1.3974 1.3841 1.3708	1.9358 ~ 1.9173 7.8990 1.8808 1.8628 1.8450 1.8273 1.8099 1.7725
47000 47400 47400 47600 47800 48000 48400 48400 48600 48800	47106 47307 47508 47709 47910 48111 48312 48513 48714 48914	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.33960 + 2 1.32679 1.31409 1.30152 1.28907 1.27674 1.26452 1.25243 1.24044 1.22858	3.95584 + 0 3.91800 3.88051 3.84339 3.80662 3.77020 3.73414 3.669841 3.66303 3.62799	1.32208 - 1 1.30944 1.29691 1.28450 1.27221 1.26004 1.24799 1.23605 1.22422 1.21251	1.3447 - 2 1.3319 1.319.1 1.3065 1.2940 1.2816 1.2694 1.2572 1.2452	1.7584 1.7416 1.7249 1.7084 1.6921 1.6759 1.6599 1.6440 1.6282 1.6127
49000 49200 49400 49600 49600 50000 50200 50400 50600	49115 49316 49517 49718 49919 50120 50321 50522 50723 50924	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.21682 + 2 1.20518 1.19365 1.18223 1.17092 1.15972 1.14863 1.13764 1.12676 1.11598	3.59328 + 0 3.55891 3.52486 3.49114 3.45774 3.42466 3.39190 3.35945 3.32731 3.29548	1-20091 - 1 1-18942 1-17805 1-16678 1-15561 1-14456 1-13361 1-12276 1-11202 1-10138	1.2215 - 2 1.2098 1.1982 1.1868 1.1754 1.1642 1.1530 1.1420 1.1311 1.1202	1.5972 ~ 1.5820 1.5568 1.5518 1.5370 1.5223 1.5077 1.4933 1.4790
51000 51200 51400 51600 51600 52000 52200 52400 52600 52800	51125 51326 51527 51728 51929 52130 52331 52532 52733 52934	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.10530 + 2 1.09473 1.08425 1.07388 1.06361 1.05343 1.04336 1.04337 1.02349 1.01370	3.26395 + 0 3.23273 3.20180 3.17117 3.14083 3.11079 3.08103 3.05155 3.02236 2.99344	1.09085 - 1 1.08041 1.07008 1.05984 1.04970 1.03966 1.02971 1.01986 1.01010 1.01010	1.1095 - 2 1.0989 1.0884 1.0780 1.0677 1.0575 1.0473 1.0373 1.0274	1.4509 1.4370 1.4232 1.4096 1.3961 1.3828 1.3695 1.3564 1.3435 1.3306
53000 53200 53400 53600 53800 54000 54200 54400 54600	53135 53336 53537 53738 53939 54140 54541 54542 54743 54944	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.00400 + 2 9.94394 + 1 9.84881 9.75459 9.66127 9.56884 9.47730 9.38664 9.29684 9.20790	2.96481 + 0 2.93644 2.90835 2.88053 2.85297 2.82568 2.79865 2.77187 2.74535 2.71909	9.90870 - 2 9.81390 9.72002 9.62703 9.53493 9.44371 9.35337 9.26389 9.17526 9.08749	1.0078 - 2 9.9820 - 3 9.8865 9.7919 9.6982 9.6055 9.5136 9.1226 9.3324 9.2431	1.3179 1.3053 1.2928 1.2804 1.2682 1.2560 1.2440 1.242321 1.2203
55000 55200 55400 55400 55600 56000 56400 56400 56400 56800	55145 55347 55548 55749 55950 56151 56352 56553 56754 56955	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	9.11981 + 1 9.03256 8.94615 8.86057 8.77580 8.69185 8.60869 8.52634 8.44477 8.36398	2.69308 + 0 2.66731 2.64180 2.61652 2.59149 2.56670 2.54215 2.51783 2.49374 2.46988	9.00055 - 2 8.91445 8.82917 8.74470 8.66104 8.57819 8.49612 8.41484 8.33484 8.25461	9.1547 - 3 9.0671 8.9804 8.8945 8.8094 8.7251 8.6416 8.5570 8.4771 8.3960	1.1971 - 1.1856 1.1743 1.1631 1.1519 1.1409 1.1300 1.1192 1.1085 1.0979
57000 57200 57400 57600 57800 58000 58200 58400 58600	57156 57357 57357 57558 57760 57961 58162 58363 58564 58755 58966	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	8.29397 + 1 8.20472 8.12622 8.04848 7.97149 7.89523 7.81970 7.74489 7.67080 7.59741	2.44625 + 0 2.42285 2.39967 2.37672 2.35398 2.33146 2.30916 2.28706 2.26519 2.24351	8-17564 - 2 8-09743 8-01996 7-94324 7-86725 7-79198 7-71744 7-64361 7-57049 7-49806	8.3157 - 3 8.2361 8.1573 8.0793 8.0020 7.9254 7.8496 7.7745 7.7001	1.0874 - 1.0770 1.0667 1.0565 1.0464 1.0364 1.0264 1.0166 1.0069

TABLE IV.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	ude	Te	emperature		-	Pressure		Den	sity
Z, ft	H, ft	T, °R	t,°F	t, °C	P, mb	P, in Hg	<u> </u>	ρ, lb ft ^{-\$}	<u>ρ</u> ρ _ο
#3000 #3200 #3400 #3600 #3600 #4000 #4200 #4400 #4600 #4600	\$2912 \$3111 \$3310 \$3509 \$3708 \$3907 \$4107 \$4306 \$4505 \$4704	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.63049 + 2 T.61495 1.59957 1.58433 1.56923: 1.55428 1.5248 1.5248 1.51029 1.49590	4,81482 + 0 4,76895 4,72352 4,67852 4,67852 4,58980 4,58980 4,58980 4,54607 4,590277 4,45967 4,45967	1.60917 - 1 1.59383 1.57365 1.55361 1.54871 1.53396 1.51935 1.50487 1.49054	1.6367 - 2 1.6211 1.6057 1.5904 1.5752 1.5602 1.5454 1.5306 1.5161	2.1402 - 1 2.1198 2.0996 2.0796 2.0598 2.0802 2.0208 2.0015 1.9825
45000 45200 45400 45600 45800 46200 46200 46400 46600 46800	44903 45102 45301 45501 45700 45899 46098 46297 46496 56695	369.970 369.970 369.970 369.970 389.970 389.970 369.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.48165 + 2 1746754 1.45356 1.43971 1.42600 1.41242 1.39896 1.38564 1.38564 1.35937	4-37531 + 0 4-33363 4-29235 4-25147 4-21097 5-17086 4-13114 4-09170 4-05282 4-01422	1.46227 - 1 1.44835 1.43455 1.42088 1.40735 1.39395 1.38067 1.36752 1.35449 1.34159	1.4873 - 2 1.4732 1.4591 1.4452 1.4315 1.417.8 1.4043 1.3909 1.3777 1.3646	1.9449 - 1 1.9263 1.9080 1.8898 1.8718 1.8540 1.8363 1.0183 1.6015
47000 47200 47400 47600 47800 48000 48000 48400 48600 48600	46894 47095 47293 47492 47691 47691 48089 48288 48487 48686	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.34642 + 2 1.33360 1.32090 1.30832 1.29586 1.28352 1.27130 1.25919 1.24720 1.23532	3.97599 + 0. 3.97061 3.90061 3.86347. 3.82667. 3.79023 3.75414 3.71839 3.68298 3.64791	1.32882 1.31616 1.30363 1.29121 1.27891 1.26674 1.25467 1.24272 1.23089 1.21917	1.3516 - 2 1.3387 1.3260 1.3133 1.3008 1.2884 1.2762 1.2640 1.2520 1.2520	1.7674 - 1 1.7505 1.7339 1.7173 1.7010 1.6848 1.6687 1.6529 1.6371 1.6215
\$9000 \$9200 \$9400 \$9600 \$9800 50200 50400 50600 50800	48685 49084 49283 49482 49681 49680 50079 50278 50478 50677	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.22356 + 2 1.21191 1.20037 1.18894 1.17762 1.16641 1.15530 1.13341 1.12262	3.61317 + 0 3.57877 3.51469 3.51094 3.47751 3.44440 3.41161 3.37913 3.34696 3.31509	1-20756 - 1 1-19606 1-19607 1-17339 1-16222 1-15116 1-14020 1-12934 1-11859 1-10794	1.2282 - 2 1.2165 1.2050 1.1935 1.1821 1.1709 1.1597 1.1487 1.1377	1.6061 - T 1.5708 1.5756 1.5606 1.5458 1.5311 1.5165 1.5021 1.4878 T.4736
51000 51200 51400 51600 51800 52000 52200 52400 52400 52800	50876 51075 51274 51473 51672 51871 52070 52269 52468 52667	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.11193 + 2 1.10135 1.09086 1.08048 1.07019 1.06000 1.04991 1.03992 1.03002 1.02021	3.28353 + 0 3.25227' 3.22131' 3.19064 3.16027 3.13019 3.10039 3.07088 3.04164 3.01269	1.09739 - 1 1.08694 1.07660 1.06635 1.05620 1.04614 1.03618 1.02632 1.01655 1.00687	1.1162 - 2 1.1056 1.0950 1.0846 1.0743 1.0641 1.0539 1.0439 1.0340	1.4596 - 1 1.4457 1.4319 1.4183 1.4048 1.3914 1.3781 1.3650 1.3520 1.3520
53000 53200 53400 53600 53800 54200 54200 54400 54600 54800	52866 53065 53264 53463 53662 53861 54059 54258 54457 54656	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	1.01050 + 2 1.00089 9.91359 + 1 9.81923 9.72577 9.63321 9.54152 9.45071 9.36077 9.27168	2.98402 + 0 2.95561 2.92748 2.89962 2.87202 2.84468 2.81761 2.76423 2.76423 2.73793	9.97289 - 2 9.87797 9.78395 9.69082 9.59859 9.50723 9.41675 9.32713 9.23836	1.0144 - 2 1.0047 9.9515 - 3 9.8568 9.7630 9.6701 9.5780 9.4889 9.3966 9.3072	1.3264 - 1 1.3138 1.3013 1.2889 1.2766 1.2645 1.2525 1.2405 1.2287
55000 55200 55400 55600 55600 56200 56400 56400 56800	54855 55054 55253 55452 55651 55850 56049 56248 56447 56646	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	9.18345 + 1 9.09605 9.00949 8.92376 8.83884 8.75473 8.67142 8.58691 8.50719 8.42624	2.71187 + 9 2.68606 2.66050 2.63518 2.61011 2.58527 2.56067 2.53630 2.51217 2.48827	9.06336 2 8.97711 8.89168 8.80706 8.72326 9.54025 8.55803 8.47660 8.39594 8.31605	9.2186 - 3 9.1309 9.0440 8.9579 8.8727 8.7882 8.7046 8.6218 8.5397 8.4585	1.2055 - 1 1.1940 1.1826 1.1714 1.1602 1.1492 1.1382 1.1274 1.1167
57000 57200 57400 57400 57600 58000 58200 58400 58400 58800	56845 57044 57242 57441 57640 57839 58038 58237 58436 58635	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	=56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	8.34696 + 1 8.26665 8.18800 8.11010 8.03294 7.95651 7.88081 7.80584 7.73158 7.65803	2.46459 + 0 = 2.44114 2.41792 2.39491 2.37213 2.37213 2.32720 2.30506 2.29313 2.26141	8.23693 - 2 8.15855 8.08093 8.00404 7.92789 7.85247 7.77776 7.70376 7.63047 7.55788	8.3780 - 3 8.2983 8.2193 8.1411 8.0637 7.9870 7.9110 7.8357 7.7612 7.6873	1.0955 - 1 1.0851 1.0748 1.0646 1.0544 1.0345 1.0345 1.0246 1.0149
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TABLE IX.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude	T)	emperature			Pressure 55	er ereses see	Den	
H, ft	Z, ft	T, °R	t,°F	t, °C	P, mb	P, in Hg	ΔÞ°	ρ, lb ft ⁻⁸	<u>ρ</u> ρ _ο
59000 59200 59400 59600 59800 60000 60400 60600 60800	59167 59369 59570 59771 59972 60173 60374 60575 60777	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	7.52473 + 1 7.45274 7.38145 7.31083 7.24089 7.17162 7.10301 7.03506 6.96776 6.90110	2.22205 + 0 2.20079 2.17974 2.15889 2.13823 2.1776 2.09752 2.07745 2.07745 2.03789	7.42633 = 2 7.35529 7.28492 7.21523 7.14620 7.07784 7.01013 6.94306 6.87664 6.81086	7.5535 - 3 7.4613 7.4097 7.3388 7.2686 7.1991 7.1302 7.0620 6.9944 6.9275	9.8772 - 2 9.7827 9.6891 9.5964 9.5046 9.4137 9.3237 9.2345 9.1461 9.0586
61000 61200 61400 61600 61800 62000 62000 62400 62600 62600	61.1.79 61380 61581 61783 61984, 62185 62386 62587 62788 62990	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	6.83508 + 1 6.76969 6.70493 6.64078 6.57725 6.51433 0.45201 6.39029 6.32915 6.26860	2-0.1840 + 0: 1-99909 1-97996 1-96102 1-94226 1-92368 1-90528 1-88705 1-86900 1-85112	6.74570 - 2 6.68116 6.61725 6.55394 6.49124 6.42914 6.36764 6.30672 6.24639 6.18663	6.8612 - 3 6.7956 6.7956 6.6662 6.6024 6.5393 6.4767 6.4147 6.3534 6.2926	8.9720 - 2 8.8661 8.8611 8.7169 8.6335 8.5509 8.4691 8.3679 8.2284
63000 63200 63400 63600 63800 64000 64200 64400 64600 64800	63191 63392 63593 63795 63996 64197 64398 64600 64801 65002	389.970 389.970 369.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	6-20864 + 1 6-19924 6-09041 6-03215 5-97444 5-91728 5-86068 5-80461 5-74908 5-69408	1.83341 + 0 1.81587 1.79850 1.78129 1.76425 1.74737 1.73066 1.71410 1.69770 1.68146	6.12745 - 2 6.06883 6.91077 5.95327 5.89631 5.83991 5.78404 5.72870 5.67390 5.61962	6.2324 - 3 6.1728 6.1:137 6.0552 5.9973 5.9399 5.8831 5.8268 5.7711	8.1497 - 2 8.0717 7.9995 7.9985 7.9180 7.6822 7.7672 7.6929 7.6193 7.5864 7.4742
65000 65200 65400 65600 65800 66000 66400 66400 66800	65203 65404 65606 65807 66008 66210 66411 66612 66813 67015	389.970 389.970 389.970 389.970 390.071 390.180 390.290 390.400 390.509 390.619	-69.700 -69.700 -69.700 -69.599 -69.580 -69.380 -69.270 -69.161 -69.051	-56.500 -56.500 -56.500 -56.500 -56.444 -56.383 -56.322 -56.261 -56.200 -56.139	5.63961 + 1 5.58565 5.53222 5.47929 5.42688 5.37499 5.32360 5.27272 5.22234 5.17245	1-66537 + 0 1-64944 1-63366 1-61803 1-60256 1-58723 1-57206 1-55703 1-55703 1-54216 1-52742	5.56586 - 2 5.51261 5.45987 5.40764 5.35591 5.30470 5.25399 5.20377 5.15405. 5.10481	5.6612 - 3 5.6070 5.5534 5.5003 5.4462 5.3396 5.2871 5.235.1 5.1836	7.4027 - 2 7.3319 7.2618 7.1923 7.1217 7.0516 6.9822 6.9135 6.8855
67000 67200 67400 67600 67800 68000 68200 68400 68400 68600	67216 67417 67619 67820 68021 68222 68424 68625 68826 69028	390.729 390.839 390.948 391.058 391.168 391.278 391.387 391.497 391.607 391.716	-68.941 -68.831 -68.722 -68.512 -68.502 -68.392 -68.283 -68.173 -68.063 -67.954	-56.078 -56.017 -55.956 -55.835 -55.774 -55.773 -55.652 -55.591 -55.530	5.12306 + 1 5.07415 5.02572 4.97777 4.93029 4.88327 4.83672 4.79062 4.7497 4.69978	1.51284 + 0 1.49840 1.48410 1.46994 1.45591 1.45591 1.4203 1.42828 1.41467 1.40119 1.38784	5.05606 - 2 5.00780 4.96000 4.97268 4.86581 4.81,941 4.77347 4.72798 4.68293 4.63832	5.1327 - 3 5.0823 5.0323 4.9829 4.9340 4.8856 4.8376 4.7902 4.7432	6.7116 - 2 6.6457 6.5804 6.5158 6.4518 6.3885 6.3258 6.2638 6.2038 6.2038
69000 69200 69400 69400 70000 70200 70400 70600 70800	69229 69430 69632 69633 70034 70236 70437 70638 70840 71041	391.826 391.936 392.046 392.155 392.265 392.375 392.485 392.594 392.704 392.814	-67.844 -67.734 -67.624 -67.515 -67.805 -67.185 -67.076 -66.966	-55.469 -55.408 -55.347 -55.225 -55.164 -55.103 -55.042 -54.920	4.65502 + 1 4.61070 4.56682 4.52337 4.48034 4.43773 4.39555 4.35377 4.31240 4.27144	1.37463 + 0 1.36154 1.34858 1.33575 1.32304 1.31046 1.29800 1.28567 1.27345 1.26135	4.59415 - 2 4.55041 4.50710 4.46422 4.42175 4.37970 4.33807 4.29684 4.25601 4.21558	4.6507 - 3 4.6051 4.5000 4.5154 4.4712 4.4274 4.3841 4.3841 4.2988 4.2567	0.0814 - 2 0.0218: 5.9028 5.9044 5.8466 5.7328 5.6767 5.6212 5.5662
71000 71200 71400 71600 71800 72000 72200 72400 72600 72800	71243 71444 71645 71847 72048 72249 72451 72652 72854 73055	392.923 393.033 393.143 393.253 393.362 393.472 393.582 393.692 393.801 393.911	-66.747 -66.637 -66.527 -66.308 -66.198 -66.088 -65.978 -65.869 -65.759	-54.859 -54.738 -54.737 -54.676 -54.554 -54.554 -54.493 -54.372 -54.372	4.23087 + 1 4.19070 4.15093 4.11155 -4.07254 4.03392 3.99568 3.95781 3.92031 3.88317	1.24938 + 0 1.23751 1.22577 1.21414 1.20262 1.19122 1.17992 1.16874 1.15767 1.14670	4.17555 - 2 4.13590 4.09665 4.05778 4.01929 3.98117 3.94343 3.90605 3.8690% 3.83239	4.2151 - 3 4.1740 4.1332 4.0928 4.0529 4.0133 3.9742 3.9354 3.8970 3.8590	5.5118 - 2 5.4580 5.4047 5.3519 5.2997 5.22479 5.1967 5.1460 5.0959 5.0462
73000 73200 73400 73600 73600 74000 74000 74600 74600 74600	73256 73458 73659 73861 74062 74264 74465 74666 74868 75069	394.021 394.130 394.240 394.350 394.460 394.569 394.679 394.899 394.899 395.008	-65.649 -65.540 -65.430 -65.320 -65.210 -65.101 -64.991 -64.881 -64.771	-54.250 -54.189 -54.128 -54.067 -54.006 -53.884 -53.823 -53.762 -53.701	3.84640 + 1 3.80998 3.77392 3.73821 3.70285 3.66783 3.63315 3.59881 3.56481 3.53113	1.13584 + 0 1.12509 1.11444 1.10389 1.09345 1.08311 1.07287 1.06273 1.05269 1.04274	3.79610 - 2 3.76016 3.72457 3.68933 3.65443 3.61987 3.58564 3.55175 3.51819 3.48496	3.8214 - 3 3.7842 3.7473 3.7108 3.6747 3.6389 3.6035 3.5685 3.5338 3.4994	4.9970 - 2 4.9483 4.9001 4.8524 4.8052 4.7584 4.7121 4.6663 4.6209 4.5760
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TABLE IX.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

ude	Į t	emperatur	e		Pressure		Den	sity
H, ff	T, °R	t,°F	t,°C	P, mb	P, in Hg:	P _o	ρ, lb ft ⁻³	<u>ρ</u> <i>Ρ</i> ο
58834 59032 59231 59430 59429 59828 60027 60226 60424 60423	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	7.58517 + 1. 7.51302 7.54155 7.37076 7.30065 7.25120 7.16242 7.09429 7.02681 6.95998	2.23990 + 0 2.21859 2.17658 2.15588 2.13537 2.13537 2.11506 2.09494 2.07502 2.05528	7.48599 - 2 7.41477 7.34424 7.27437 7.20518 7.13664 7.06876 7.00152 6.93493 6.66896	7.6142 - 3 7:5418 7.4700 7.3990 7.3286 7.2589 7.1898 7.1214 7.0537 6.9866	9.9566 - 2 9.8618 9.7680 9.6751 9.5831 9.4919 9.4016 9.3122 9.3122 9.1359
60822 61021 61220 61419 61617 61816 62015 62214 62413 62611	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	6.89378 + 1 6.82621 6.76327 6.69895 5.63523 6.57213 6.50963 6.44772 6.38641 6.32567	2.03573 + 0 2.01637 1.99719 1.97820 1.95938 1.94075 1.92229 1.90401 1.88590 1.86797	6.80363 - 2. 6.73892 6.67483 6.61135 6.54847 6.48619 6.48619 6.36341 6.30289 6.24295	6.9202 - 3 6.85%3 6.7891 6.72%6 6.6606 6.5973 6.53%5 6.472% 6.4108 6.3499	9:0490 - 2 8:9629 8:8777 8:7933 8:7096 6:6268 8:5448 8:4635 8:3830 8:3033
62810 63009 63208 63407 63605 63804 64003 64202 64400 64599	389.970 389.970 389.970 389.970 389.970 389.970 389.970 389.970	-69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700 -69.700	-56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500 -56.500	6.26552 + 1 6.20594 6.18693 6.18848 6.03058 5.97324 5.91644 5.860447 5.74928	1.85021 + 0 1.83261 1.81519 1.79793 1.76083 1.76390 1.74713 1.73051 1.71406 1.69776	6.18359 - 2 6.12479 6.06654 6.00886 5.95172 5.89513 5.83908 5.76356 5.72857 5.67410	6.2895 - 3 6.2297 6.1704 6.1118 6.0537 5.9991 5.9391 5.8826 5.8267 5.7713	8.2243 - 2 8.1461 8.0687 7.9919 7.9159 7.8407 7.7661 7.6923 7.6191 7.5467
64798 64997 65196 65394 65593 65792 65791 66189 66388 66587	389.970 389.970 389.970 389.970 389.970 390.066 390.175 390.284 390.393	-69.700 -69.700 -69.700 -69.700 -69.700 -69.405 -69.495 -69.386 -69.277	-56.500 -56.500 -56.500 -56.500 -56.500 -56.447 -56.386 -56.326 -56.204	5.69462 + 1 5.64048 5.58685 5.53374 5.48113 5.42903 5.37744 5.32635 5.27577 5.22568	1.68162 + 0 1.66563 1.64980 1.63411 1.61858 1.60319 1.58796 1.57287 1.55728 1.55723 1.54314	5.62015 - 2 5.56672 5.51380 5.46138 5.40945 5.35804 5.358712 5.25670 5.20678 5.15734	5.7164 = 3 5.6621 5.6682 5.5589 5.5021 5.4855 5.3824 5.3824 5.2902 5.2385	7.4749 - 2 7.4039 7.3335 7.2638 7.1947 7.1246 7.0549 6.9859 6.9176 6.8500
66785 66984 67183 67382 67580 67779 67978 68176 68375 68574	390.611 390.720 390.829 390.938 391.947 391.156 391.265 391.375 391.483 391.592	-69.059 -68.950 -68.841 -68.623 -68.514 -68.405 -68.187 -68.187	-56.083 -56.023 -55.902 -55.841 -55.780 -55.759 -55.759	5.17608 + 1 5.12696 5.07833 5.03017 4.98248 4.93526 4.88850 4.88850 4.87034 5.75094	1.52849 + 0 1.51399 1.49963 1.48541 1.47133 1.45738 1.45738 1.44357 1.42990 1.41636 1.40295	5.10839 - 2 5.05991 5.05192 4.96439 4.91732 4.87072 4.82457 4.77887 4.77887 4.73362 4.68881	5.1874 - 3 5.1367 5.0866 5.0369 4.9878 4.9878 4.8939 4.8930 4.8433 4.7961	6.7831 - 2 6.7109 6.6513 6.5864 6.5222 6.4585 6.3956 6.3332 6.2715 6.2104
68772 68971 69170 69368 69367 69766 69764 70163 70362 70360	391.701 391.810 391.7019 392.028 392.137 392.246 392.355 392.355 392.573	-67.969 -67.860 -67.751 -67.642 -67.533 -67.424 -67.315 -67.206 -67.097	-55.538 -55.478 -55.456 -55.236 -55.235 -55.174 -55.054	4:70598 + 1 4:66146 4:61737 5:57:371 4:53048 4:46767 4:46527 4:40329 4:36172 4:32055	1.38967 + 0 1.37653 1.36351 1.36351 1.35785 1.32521 1.32521 1.31269 1.30029 1.28802	4:64444 - 2: 4:60050 4:55699 4:55699 4:51390 4:47124 4:42898 4:38714 4:38714 4:3571 4:26405	4.7031 - 3 4.6573 4.6120 4.5521 4.5227 4.4352 4.3924 4.3071	6.1499 = 2 6.0900 6.0308 5.9721 5.9140 5.8565 5.7995 5.7432 5.6874 5.6321
70759 70958 71156 71355 71554 71752 71951 72150 72348 72547	392.791 392.900 393.009 393.118 393.227 393.336 393.445 393.554 393.554 393.772	-66.879 -66.770 -66.661 -66.552 -66.443 -66.334 -66.225 -66.116 -66.007	-54.933 -54.872 -54.812 -54.690 -54.630 -54.509 -54.388	4.27978 + 1 4.23941 5.19943 4.15985 4.12064 4.08337 4.00530 3.96760 3.96760	1.26382 + 0 1.25190 1.24009 1.24009 1.22840 1.21683 1.20536 1.19401 1.18276 1.17163 1.16060	4.22382 = 2 4.18398 4.14352 4.10545 4.06676 4.02884 3.99050 3.95050 3.951571 3.87886	4:2653 - 3 4:2239 4:1829 4:1823 4:1021 4:0624 4:0230 3:9840 3:9858	5.5774 = 2 5.5233 5.4697 5.4166 5.3641 5.3121 5.2006 5.2006 5.1591 5.1092
72745 72944 73143 73341 73540 73738 73937 74135 74334 74533	393.881 393.990 394.099 394.208 394.317 394.426 394.535 394.753 394.753	-65.789 -65.680 -65.571 -65.353 -65.248 -65.135 -64.917 -64.808	-54:327 -54:206 -54:106 -54:085 -54:085 -54:085 -53:904 -53:904 -53:843 -53:782	3:89328 + 1 3:85667 3:82041 3:78449 3:74893 3:71372 3:67884 3:64830 3:61010 3:57622	1:14969 + 0 1:13887 1:12817 1:11756 1:10706 1:09666 1:09666 1:09666 1:096666 1:096666 1:096666	3:84237 - 2 3:80623 3:77045 3:73501 3:69991 3:69991 3:66515 3:63073 3:59665 3:56289 3:52946	3.8694 - 3 3.8319 3.7948 3.7581 3.7218 3.6358 3.6502 3.5459 3.5800 3.5454	5.0597 - 2 5.0107 5.9623 4.9142 4.8667 4.8197 4.7270 4.7270 4.6813 4.6361
	## 1	56834 389.970 59032 389.970 59032 389.970 59032 389.970 59032 389.970 590430 389.970 60027 389.970 60224 389.970 60225 389.970 60226 389.970 601021 389.970 601021 389.970 601021 389.970 601021 389.970 601021 389.970 601021 389.970 601021 389.970 601021 389.970 601021 389.970 601021 389.970 601021 389.970 601021 389.970 602015 389.970	1, ft	H, ft	T, P	## ## ## ## ## ## ## ## ## ## ## ## ##	## ## ## ## ## ## ## ## ## ## ## ## ##	H, ft T, °R

TABLE IX.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude-	т	emperatur		ALITIODE,	Pressure		Den	sitv
		•		-		,			
H, ft	Z, ft	T, °R	t,°F	†,.°C	P, mb	P, in Hg	<u> </u>	ρ, lb ft ⁻³	ρ ρο
75000 75200 75400 75400 75800 76000 76400 76600 76800	75271 75472 75674 75875 76077 76278 76479 76881 76882 77084	395.118 395.228 395.337 395.447 395.567 395.776 395.776 395.886 395.996	-64.552 -64.442 -64.333 -64.223 -64.213 -63.03 -63.784 -63.784	-53.640 -53.579 -53.518 -53.396 -53.376 -53.274 -53.213 -53.152 -53.091	3.49779 + 1 3.40476 3.43206 3.39967 3.33560 3.33584 3.30439 3.27325 3.24240 3.21186	1.03290 + 0 1.02314 1.01349 1.00392 9.94453 = 1 9.85074 9.75787 9.65589 9.57481	3.45205 - 2. 3.41945 3.38718 3.35522 3.32357 3.27222 3.26118 3.23044 3.20000 3.16986	3.4654 - 3 3.4318 3.3984 3.3654 3.3327 3.3004 3.2684 3.2367 3.2053 3.1742	4.5315 - 2 4.4075 4.4439 4.4007 4.3580 4.3157 4.2738 4.2324 4.1913 4.1507
77000 77200 77490 77600 77800 78000 78200 78400 78400 78600	77285 77487 77688 77890 78091 78293 78494 78696 78897 79099	396.215 396.325 396.435 396.654 396.654 396.764 396.874 396.983 397.093 397.203	-63.455 -63.345 -63.235 -63.126 -63.016 -62.906 -62.796 -62.587 -62.577	-53.030 -52.969 -52.969 -52.848 -52.887 -52.726 -52.665 -52.604 -52.543 -52.482	3.18161 + 1 3.15165 3.12199 3.09261 3.06352 3.03471 3.00617 2.97791 2.94993	9.39529 - 1 9.30682 9.21922 9.13248 9.04656 8.96148 8.87722 8.79377 8.71114	3.14001 - 2 3.11044 3.08116 3.05217 3.05217 3.02345 2.99502 2.96686 2.93897 2.91136 2.88400	3.1434 - 3 3.1130 3.0828 3.0530 3.0530 3.0234 2.9942 2.9652 2.9365 2.9081 2.8800	4.1105 - 2 4.0706 4.0312 3.9922 3.9535 3.9152 3.8774 3.8399 3.8027 3.7660
79000 79200 79400 79600 79600 80000 80200 80400 80600 80600	79300 79502 79703 79705 80107 80308 80510 80711 80913 81114	397.313 397.422 397.532 397.642 397.751 397.861 397.971 398.081 398.190 898.300	-62.357 -62.248 -62.138 -62.028 -61.919 -61.809 -61.589 -61.589 -61.370	-52.421 -52.360 -52.299 -52.238 -52.177 -52.116 -52.055 -51.994 -51.933 -51.872	2.89477 + 1 2.86759 2.84067 2.81402 2.76147 2.73558 2.70993 2.68454 2.65939	8.54826 - 1 8.46799 6.38851 8.30979 8.23183 8.15462 8.07616 8.00243 7.92744 7.85317	2.85692 - 2 2.83009 2.60353 2.77722 2.75116 2.72536 2.69980 2.67450 2.64943 2.62461	2.8521 - 3 2.8246 2.7973 2.7703 2.7735 2.7171 2.6908 2.6649 2.66392 2.6137	3.7296 ~ 2 3.6935. 3.6578 3.6225 3.5575 3.5529 3.5186 3.4847 3.48511 3.4178
81000 81200 81400 81400 81600 82000 82400 82400 82800	81316 81517 81719 81721 82122 82524 82525 82727 82928 83130	398.410 398.520 378.629 378.629 398.739 398.849 399.958 399.068 399.178 399.288 399.397	-61.260 -61.150 -61.091 -60.931 -60.821 -60.612 -60.492 -60.382 -60.273	-51.811 -51.750 -51.689 -51.628 -51.507 -51.506 -51.384 -51.324 -51.263	2.63448 + 1 2.60981 2.58538 2.56118 2.53722 2.51349 2.48999 2.46671 2.44366 2.42083	7.77962 - 1 7.70677 7.63463 7.56317 7.49243 7.42233 7.35293 7.28419 7.21612 7.14870	2.60003 - 2 2.57568 2.55157 2.52769 2.50404 2.48062 2.45743 2.43445 2.41170 2.38917	2.5885 - 3 2.55389 2.5389 2.5144 2.4902 2.4663 2.4425 2.4420 2.3758 2.3727	3.3849 - 2 3.3522 3.3199 3.2880 3.2563 3.2250 3.1939 3.1632 3.1328 3.1027
83000 83400 83400 83600 84000 84000 84400 84600 84600	83332 83735 83737 84138 84341 84541 84545 85146	399.507 399.617 399.727 399.836 399.846 400.066 400.145 400.285 400.386	-60.163 -60.073 -59.943 -59.724 -59.724 -59.505 -59.395 -59.285 -59.175	+51.202 -51.141 -51.080 -51.019 -50.836 -50.836 -50.775 -50.771 -50.653	2.39821 + 1 2.37582 2.35364 2.333167 2.30992 2.28837 2.26703 2.24570 2.22496 2.20423	7.08192 1 7.01579 6.95029 6.88543 6.82119 6.75756 6.69454 6.63213 6.57031 6.50910	2.36685 - 2 2.34475 2.32286 2.30118 2.27971 2.25845 2.23739 2.21653 2.19587 2.17541	2.3499 - 3 2.3273 2.3050 2.2828 2.2609 2.2392 2.2177 2.1964 2.1754 2.1545	3.0728 - 2 3.0433 3.0141 2.9851 2.9564 2.9281 2.9281 2.9000 2.8721 2.8173
85000 85200 85400 85600 85600 86000 86400 86400 86600	85348 85751 85751 85953 86154 86356 86758 86761 87163	400.60h 400.71h 400.82h 400.93h 401.043 401.153 401.263 401.372 401.382 401.592	-59.066 -58.956 -58.846 -58.627 -58.517 -58.517 -58.298 -58.188 -58.078	-50.592 -50.531 -50.470 -50.409 -50.348 -50.226 -50.165 -50.104	2.18370 + 1 2.16336 2.14322 2.12327 2.10352 2.08395 2.00457 2.04538 2.02636 2.00753	6.44846 - 1 6.38841 6.32893 6.27003 6.27109 6.15390 6.09967 6.03999 5.98385. 5.92824	2.15514 - 2 2.13507 2.11520 2.09551 2.07601 2.05670 2.03757 2.01863 1.99987 1.98128	2.1339 - 3 2.1134 2.0932 2.0731 2.0533 2.0336 2.0141 1.9949 1.9758 1.9569	2.79.03 - 2 2.76.36 2.73.71 2.71.09 2.6849 2.65.92 2.63.38 2.60.86 2.58.36 2.55.89
87000 87200 87400 87800 87800 88200 88400 88400 88800	87364 87768 87768 87970 68171 88373 88576 88776 88978	401.702 401.811 401.921 402.031 402.141 402.250 402.360 402.470 402.579 402.689	-57.968 57.859 -57.749 -57.529 -57.320 -57.300 -57.090 -56.000		1.98888 + 1 1.97041 1.95212 1.93400 1.91605 1.89828 1.88067 1.86323 1.84596 1.82885	5.87317 - 1 5.81862 5.76460 5.71109 5.65809 5.50560 5.55361 5.50212 5.45112 5.40060	1.96288 - 2. 1.94465 1.92659 1.90871 1.89099 1.87345 1.85608 1.83887 1.82182 1.80494	1.9382 - 3 1.9197 1.9013 1.8852 1.8652 1.8474 1.8297 1.8123 1.7950	2.5344 - 2 2.5102 2.4862 2.4625 2.4590 2.4157 2.3926 2.3698 2.3472 2.3248
89200 89200 89400 89400 99000 90000 90400 90400 90400 90800	89381 89583 89785 89785 9987 90188 90390 90592 90794 90995 91197	402.799 402.909 403.018 403.238 403.238 403.348 403.567 403.567 403.677	-56.871 -56.761 -56.5542 -56.432 -56.432 -56.103 -55.103 -55.993 -55.883	-49.373 -49.312 -49.251 -49.190 -49.108 -49.007 -48.885 -48.885	1.81191 + 1 1.79513 1.77850 1.77850 1.74573 1.72958 7.71358 1.69774 1.68204 1.66650	5.35056 1 5.30101 5.25192 5.20330 5.15515 5.10745 5.06021 5.06021 5.01342 4.96707 4.92117	1.78822 - 2 1.77165 1.75525 1.73900 1.72291 1.70896 1.69118 1.67554 1.66005 1.64471	1.7609 - 3 1.7441 1.7275 1.7110 1.6948 1.6786 1.6626 1.6468 1.6311 1.6156	2.3026 - 2 2.2807 2.2589 2.237k 2.2161 2.1950 2.1741 2.153k 2.1329 2.1127
				-					

TABLE IV.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

ДІТІТ	ude	. т	emperatur	e·		Pressure	,	Den	sity
Z, ft	H, ft.	T, °R	t,°F	t _i .º.C	P, mb	P, in Hg	P _o	ρ, lb ft ⁻³	$\frac{\rho}{\rho_0}$
75000 75200 75400 75400 75600 75800 76200 76400 76600 76800	74731. 74930 75128 75327 75525 75724 75923 76121 76320 76518	394.971 395.079 395.188 395.297 395.406 395.515 395.624 395.733 395.842 395.951	-64.699 -64.591 -64.482 -64.373 -64.264 -64.155 -64.046 -63.937 -63.828 -63.719	-53.722 -53.661 -53.661 -53.540 -53.480 -53.489 -53.238 -53.238 -53.238	3.54268 + 1 3.50945 3.47656 3.47397 3.817171 3.377975 3.34810 3.31676 3.28572 3.28572 3.25498	1.04615 + 0 1.03634 1.02663 1.01701 1.00775 9.98040 - 1 9.88695 9.779440 9.70274 9.61196	3.49635 - 2 3.46356 3.43109 3.39894 3.35709 3.33555- 3.30432 3.27339 3.24276 3.21242	3.5112 4 3 3.4738 3.4106 3.4106 3.377 3.3451 3.3129 3.2810 3.2494 3.2181	4.59/14 9.5471 4.5032 4.4598 4.4167 4.3742 4.320 4.2903 4.2490 4.2081
77000 77200 77400 77600 77800 78000 78200 78400 78600 78600	76717 76915 77114 77312 77511 77709 77908 78106 78305 78503	396.060 396.169 396.278 396.387 396.496 396.604 396.713 396.822 396.931 397.040	-63,610 -63.501 -63.392 -63.283 -63.174 -63.066 -62.957 -62.848 -62.739 -62.630	-53.117 -53.056 -52.996 -52.935 -52.875 -52.814 -52.754 -52.633 -52.633	3.22454. + 1 3.19439 13.16453 13.13496 3.10567 3.07667 3.07950 2.99132 2.96342	9.52207 - 1 9.43303 9.34486 9.25754 9.17105 9.08540 9.00058 8.91657 8.83337 8.75098	3.18238 - 2 3.15262 3.152315 3.09397 3.06506 3.03644 3.00809 2.98001 2.95221 2.92467	3.1871 - 3 5.1564 3.1261 3.0960 3.0662 3.0368 3.0076 2.9787 2.97501	4.1676 - 4.1275 4.0878 4.0484 4.0495 3.9710 3.9328 3.8951 3.8576 3.8206
79000 79200 79400 79600 79800 80000 80200 80400 80400 80600 80800	78702 78900 79099 79297 79496 79694 79893 80091 80290 80488	397.149 397.258 397.367 397.476 397.585 397.693 397.802 397.911 398.020 398.129	-62.521 -62.412 -62.303 -62.194 -62.085 -61.977 -61.868 -61.759 -61.650 -61.551	-52.512 -52.451 -52.391 -52.370 -52.270 -52.209 -52.149 -52.088 -52.028	2.93578. + 1 2.90841 2.86131 2.85446 2.852787 2.80154 2.77546 2.774963 2.72405 2.69871	8.66936 - 1 8.58850 8.50850 8.42923 8.35071 8.19593 8.11966 8.04412 7.96930	2.89739 - 2 2.87038 2.84363 2.81714 2.79089 2.76491 2.73917 2.71368 2.68843 2.66342	2.8937 - 3 2.8860 2.8385 2.8113 2.7883 2.7576 2.7312 2.7051 1.6792 2.6535	3.7839 - 3.7476 3.77177 3.6761 3.6409 3.6060 3.5714 3.5372 3.5034 3.4698
81000 81200 81400 81600 81800 82000 82200 82400 82400 82600 82800	80687 80885 81983 81282 81480 81679 81877 82076 82274 82473	398.238 398.347 398.456 398.673 398.673 398.782 398.891 399.000 399.109 399.218	-61.432 -61.323 -61.214 -61.105 -60.997 -60.888 -60.779 -60.670 -60.561	-51.907 -51.846 -51.786 -51.665 -51.665 -51.604 -51.544 -51.483 -51.362	2.67362 + 1 2.64877 2.62415 2.59977 2.57563 2.55171 2.52803 2.50457 2.48134 2.45632	7.89520 - 1 7.82180 7.74912 7.67713 7.60583 7.53521 7.46527 7.39600 7.32738 7.25943	2.63866 - 2 2.61413 2.58984 2.56578 2.54195 2.51835 2.49497 2.47182 2.44889 2.42618	2.6281 - 3 2.6030 2.5781 2.5534 2.55949 2.5049 2.4809 2.4873 2.4373 2.4338	3.4366 - 3.4037 3.3712 3.3390 3.3070 3.2754 3.22432 3.2132 3.1825 3.1521
83000 83400 83400 83400 83800 84000 84200 84400 84600 84800	82667 82869 83068 83266 83465 83663 83861 84060 84258 84457	399.327 399.435 399.544 399.653 399.762 399.871 399.980 400.089 400.197	-60.343 -60.235 -60.126 -60.017 -59.908 -59.799 -59.690 -59.873 -59.473	-51.302 -51.241 -51.181 -51.120 -51.060 -51.000 -50.939 -50.818 -50.758	2.43553 + 1 2.4-1296 2.39060 2.36846 2.34652 2.32480 2.30328 2.28197 2.26087 2.23996	7-19213 - 1 7-12547 7-05944 6-99405 6-92928 6-86513 6-80159 6-73866 6-67633 6-61459	2.40368 - 2 2.38141 2.35934 2.33749 2.31584 2.29440 2.27316 2.25213 2.25213 2.23130. 2.21067	2.3876 - 3 2.3648 2.3422 2.3199 2.2978 2.2759 2.2542 2.2328 2.2115 2.1905	3.1221 - 3.0923 3.0628 3.0336 3.0047 2.9761 2.9477 2.9196 2.8918 2.8643
85000 85200 85400 85600 85800 86000 86400 86400 86800	84655 84853 85052 85052 85448 85647 85845 86043 86440	400.415 400.524 400.633 400.742 400.959 401.068 401.177 401.286 401.395	-59.255 -59.146 -59.037 -58.928 -58.820 -58.711 -58.602 -58.493 -58.384 -58.275	-50.697 -50.637 -50.576 -50.455 -50.395 -50.334 -50.274 -50.213 -50.153	2.21925 + 1 2.19874 2.17843 2.17831 2.13838 2.11864 2.09909 2.07972 2.06054 2.04154	6.55344 - 1 6.49288 6.43289 6.37347 6.31462 6.25633 6.19860 6.14141 6.08477 6.02866	2.19023 - 2 2.16999 2.14994 2.13008 2.11041 2.09093 2.07164 2.05252 2.03359 2.01484	2.1696 - 3 2.1490 2.1286 2.108.3 2.08.5 2.0865 2.0488 2.0294 2.0101 1.9910	2.8371 - 2.8101 2.7834 2.7569 2.7307 2.7048 2.6791 2.6536 2.6285 2.6035
87000 87200 87400 87400 87600 68000 88200 88400 88600 88600	86637 86637 87035 87234 87432 87630 87829 88027 88225 88423	401.503 401.612 401.721 401.839 402.047 402.156 402.374 402.374	-58. \\\ -58. \\ -57. 949 -57. 840 -57. 623 -57. 514 -57. 405 -57. 187	-50.093 -50.032 -49.972 -49.911 -49.790 -49.790 -49.669 -49.609 -49.549	2.02272 + 1 2.00408 1.98562 1.96733 1.94922 1.93128 1.91350 1.89590 1.87847 1.86120	5.97309 - 1 5.91805 5.86353 5.80953 5.75604 5.70306 5.65058 5.59860 5.54711 5.49611	1.99627 - 2 1.97787 1.95965 1.94161 1.92373 1.90602 1.88848 1.87111 1.85390 1.83686	1.9721 - 3 1.9534 1.95349 1.9166 1.8984 1.8804 1.8626 1.8450 1.8275 1.8102	2.5788 - 2.5544 2.5301 2.5062 2.4824 2.4589 2.4356 2.4126 2.3897 2.3671
89000 89200 89400 89400 99000 90000 90200 90400 90600 90800	88622 88820 89018 89217 89415 89613 89812 90010 90208 90406	402.591 402.700 402.809 402.918 403.135 403.244 403.353 403.353 403.571	-57.079 -56.970 -56.861 -56.752 -56.535 -56.535 -56.317 -56.208 -56.099	-49.488 -49.428 -49.367 -49.307 -49.186 -49.125 -49.005 -48.944	1.84409 + 1 1.82715 1.81036 1.77374 1.77727 1.76096 1.74480 1.72880 1.71294 1.69724	5.44560 - 1 5.39556 5.34599 5.29690 5.24827 5.20011 5.15239 5.10513 5.05832 5.01194	1.81998 - 2 1.80325 1.78669 1.77028 1.75403 1.73793 1.72198 1.70619 1.69054 1.67504	1.7931 - 3 1.7762 1.7754 1.7754 1.7427 1.7263 1.7100 1.6938 1.6778 1.6620 1.6463	2.3447 - 2.3226 2.3206 2.2789 2.2573 2.2360 2.2149 2.1940 2.1733 2.1528

TABLE IX.—Continued

GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

	GEOPOTENTIAL		ALITHODE,	ENGLISH C)N(15	1			
. Altitude	e	т.	emperatur	e . ,	1	Pressure		Den	sity
H, ft 2	Z, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	마마	ρ, lb ff ⁻³	<u>ρ</u> ρ _ο
91000 91200 91400 91600 91800 92000 92200 92400 92600 92800	91399 91601 91802 92004 92206 92408 92609 92811 93013 93215	403.896 404.606 404.116 404.225 404.335 504.445 404.555 404.664 404.774 404.684	-55.774 -55.664 -55.554 -55.355 -55.225 -55.115 -55.006 -54.896	-48.763 -48.762 -48.641 -48.580 -48.519 -48.459 -48.336 -48.336 -48.276	1.65110 + 1 1.63585 1.62074 1.60578 1.59096 1.57628 1.56174 1.554734 1.53307 1.51894	4.87570 - 1 4.83066 4.78605 4.74187 4.69810 4.65475 4.61182 4.55628 4.52716 4.48543	1.62951 2 1.61446 1.59955 1.58478 1.57015 1.55567 1.54132 1.52710 1.51302 1.49908	1.6003 - 3 1.5851 1.5700 1.5551. 1.5403 1.5257 1.5112 1.4969 1.4827 1.4686	2.0926 - 2 2.0727 2.0530 2.0535 2.0142 1.9950 1.9761 1.9573 1.9388
93000 93200 93400 93600 93800 94000 94200 94400 94600 94800	93417 93618 93820 94022 94224 94426 94627 94627 94829 95031 95233	404.994 405.103 405.213 405.323 405.532 405.542 405.652 405.762 405.871 405.981	-54.676 -54.567 -54.557 -54.5347 -54.238 -54.128 -54.018 -53.799 -53.689	-48.154 -48.093 -48.032 -47.971 -47.910 -47.849 -47.788 -47.766 -47.666	1.50494 + 1 1.49108 1.47735 1.46375 1.45027 1.43693 1.42371 1.41061 1.39764	4.14410 - 1 4.40316 4.36261 4.36244 4.28265 4.24324 4.20421 4.16554 4.16554 4.16554 4.08930	1-48526 - 2 1-47158 1-45803 1-44460 1-43131 1-41814 1-40509 1-39217 1-37937 1-36669	1.4547 - 3 1.4409 1.4272 1.4137 1.4003 1.3870 1.3739 1.3609 1.3480 1.3353	1.9022 - 2 1.8841 1.8663 1.8466 1.8311 1.8137 1.7966 1.7796 1.7627
95200 95400 95400 95800 96000 96400 96400	95435 95637 95836 96040 96242 96444 96646 96848 97050 97251	406.091 406.201 406.310 406.530 406.639 406.639 406.859 406.969 407.078	-53.579 -53.469 -53.250 -53.250 -53.031 -52.921 -52.811 -52.701 -52.592	-47.544 -47.483 -47.4261 -47.361 -47.300 -47.239 -47.178 -47.177 -47.056	1.37207 + 1. 1.359%6 1.34698 1.33461 1.32236 1.31022 1.29820 1.28629 1.27450 1.26281	4.05172 - 1 4.01449. 3.97762 3.94110 3.90492 3.86908 3.83358 3.79842 3.76358 3.72908	1.35413 - 2 1.34169 1.32936 1.31716 1.30506 1.29309 1.28122 1.26947 1.25783 1.24630	1.3226 - 3 1.3101 1.2978 1.2855 1.2733 1.2613 1.2494 1.2376 1.2259	1.7295 - 2 1.7132 1.6970 1.6809 1.6651 1.6493 1.6338 1.6183 1.6031
97200 97400 97400 97800 98000 98400 98400	97453 97655 97857 98059 98261 98463 98665 98867 99068 99270	407.188 407.298 407.408 407.517 407.627 407.737 407.846 407.956 408.066 408.176	-52.482 -52.372 -52.262 -52.753 -52.043 -51.933 -51.824 -51.604 -51.494	-46.934 -46.873 -46.812 -46.752 -46.691 -46.630 -46.508 -46.508 -46.386	1.25124 + 1 1.23977 1.22842 1.21717 1.20602 1.19498 1.18405 1.17322 1.16249 1.15186	3.69490 - 1 3.66105 3.62751 3.59829 3.56138 3.52879 3.49650 3.43283 3.40184	1.23488 - 2 1.22356 1.21235 1.20125 1.19025 1.17936 1.16857 1.15788 1.14729 1.13680	1.2029 - 3 1.1916 1.1803 1.1692 1.1582 1.1473 1.1365 1.1258 1.1152 1.1047	1.5730 - 2 1.5583 1.5583 1.5583 1.5289 1.5185 1.5002 1.4861 1.4721 1.4583 1.4445
99200 99400 99600 100000 100000 100400 100400	99472 99674 99876 00078 00280 00482 00684 00886 01088	408.285 408.395 408.505 408.615 408.834 408.834 408.984 409.053 409.273	-51.385 -51.275 -51.165 -51.055 -50.946 -50.836 -50.726 -50.617 -50.507 -50.397	-46.325 -46.264 -46.203 -46.142 -46.020 -45.959 -45.837 -45.776	1.14133 + 1 1.13090 1.12057 1.11034 1.10020 1.09015 1.08020 1.07035 1.06059	3.37035 - 1 3.37955 3.30904 3.27882 3.24888 3.21922 3.18984 3.16074 3.13191 3.10335	1.12641 - 2 1.11611: 1.10592 1.09582 1.09581 1.07590 1.06608 1.056055 1.056072	1.0943 - 3 1.0840 1.0738 1.0637 1.0537 1.0537 1.0340 1.0340 1.0243 1.0147	1.4309 - 2 1.4175 1.4042 1.5910 1.3779 1.3649 1.3521 1.3524 1.3269 1.3144
101200 1 101400 1 101600 1 101800 1 102000 1 102200 1 102400 1	01492 01694 01895 02097 02299 02501 02703 02905 03107 03309	409.383 409.492 409.602 409.712 409.822 409.931 410.041 410.151 410.260 410.370	-50.287 -50.178 -50.068 -49.638 -49.848 -49.739 -49.629 -49.519 -49.410 -49.300	-45.715 -45.654 -45.593 -45.532 -45.471 -45.410 -45.349 -45.228 -45.228	1.04133 + 1 1.03184 1.02244 1.01313 1.00390 9.94763 + 0 9.85709 9.76741 9.67855 9.59053	3.07506 - 1 3.04703 3.01927 2.99177 2.96453 2.93754 2.91080 2.888431 2.85807 2.83208	1.02772 - 2 1.01835 1.00907 9.99881 - 3 9.990776 9.81755 9.72819 9.63968 9.55199 9.46511	9.9575 - 4 9.8641 9.7716 9.6800 9.5893 9.4995 9.4105 9.3224 9.2351 9.1486	1.3021 - 2 1.2899 1.2778 1.2658 1.2658 1.2539 1.2422 1.2305 1.2190 1.2076 1.1963
103200 1 103400 1 103600 1 103800 1 104000 1 104400 1 104400 1	03511 03713 03915 04117 04319 04521 04723 04925 05127 05329	410.480 410.590 410.699 410.809 410.919 411.029 411.138 411.358 411.358	-49.190 -49.080 -48.971 -48.861 -48.681 -48.681 -48.522 -48.312 -48.203	-45.106 -45.045 -44.984 -44.862 -44.801 -44.740 -44.679 -44.618	9.50333 + 0 9.41695 9.33138 9.24660 9.16262 9.07943 8.99700 8.91535 8.83447 8.75434	2.80633 - 1 2.78082 2.75555 2.73052 2.70572 2.68115 2.65681 2.63270 2.60882 2.58516	9.37906 - 3 9.29380 9.20935 9.12569 9.12569 9.04280 8.96070 8.87935 8.79877 8.71895 8.63986	9.0630 - 4 8.9783 8.8943 8.8111 8.728 8.6472 8.5664 8.4864 8.4864	1.1851 - 2 1.1740 1.1630 1.1522 1.1414 1.1307 1.1202 1.1097 1.0993
105500 1 106000 1 106500 1 107000 1 107500 1 108500 1 1099000 1	05531 06036 06542 07047 07552 08057 08562 09067 09573 10078	411.590 412.358 413.126 413.894 414.663 415.431 416.199 416.967 417.735 418.503	-48.080 -47.312 -46.544 -45.776 -45.007 -44.239 -43.471 -42.703 -41.935 -41.935	-44.489 -44.062 -43.635 -43.209 -42.782 -42.355 -41.928 -41.075 -40.648	8.67%95 + 0 8.47984 8.289%7 8.10371 7.922%5 7.7%557 7.57295 7.40449 7.24007 7.07960	2.56171 - 1 2.50%10 2.%4788 2.37303 2.33950 2.28727 2.23629 2.1865% 2.13799 2.09060	8.56151 - 3 8.36895 8.18107 7.99774 7.81885 7.64428 7.47392 7.30766 7.14540 6.98702	8.2507 - 4 8.0501 7.8548 7.6645 7.4792 7.2987 7.1229 6.9516 6.7847 6.6222	1.0789 - 2 1.0527 1.0271 1.0022 9.7800 - 3 9.3141 9.0901 8.8719 8.6593

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TABLE IX.—Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	, , ,	-			ALTHODE, E	· · · · · · · · · · · · · · · · · · ·		© Dee	
A		'	emperature			Pressure		Den	sity
Z, ft	H, ft.	T, [¢] R	t,°F	t,°C	P, mb	P, in Hg	P _o	ρ, lb ft ⁻³	$\frac{\rho}{\rho_0}$
91000 91200 91400 91600 91600 92000 92200 92400 92600 92800	90605 90803 91001 91199 91398 91596 91794 91992 92191 92389	403.679 403.788 403.897 404.006 404.114 404.223 404.332 404.441 404.549 404.658	-55.99.1 -55.882 -55.773 -55.664 -55.556 -55.5447 -55.338 -55.229 -55.121	-48.884 -48.823 -48.702 -48.642 -48.522 -48.522 -48.400 -48.340	1.68168 + 1 1.66628 1.65101 1.63590 1.62092 1.60609 1.59139 1.57684 1.56242 1.54814	4.96601 - 1 4.92051 4.87544 4.83080 4.78658 4.74277 4.69938 4.65640 4.61382 4.57165	1:65969 - 2 1:64449 1:62942 1:61450 1:59972 1:58508 1:57058 1:55622 1:54199 1:52789	1.6308 - 3 1.6154 1.6002 1.5851 1.5702 1.5554 1.5407 1.5262 1.5119	2.1325 - 2 2.1124 2.0924 2.0727 2.0532 2.0339 2.0147 1.9958 1.9770
93000 93200 93400 93600 93800 94000 94200 94500 94600 94800	92587 92785 92984 93182 93380 93578 93776 93975 94173 94371	404.767 404.876 404.984 405.093 405.202 405.311 405.419 405.528 405.637 405.746	-54.903 -54.794 -54.686 -54.577 -54.468 -54.359 -54.251 -54.033 -53.924	-48.279 -48.219 -48.159 -48.098 -48.038 -47.977 -47.917 -47.857 -47.736	1.53399 + 1 1.51997 1.50609 1.49234 1.47872 1.46522 1.45186 1.63862 1.42550	4.52987 - 1. 3.48848 4.44749 4.40688 4.36665 4.32681 4.28733 4.24823 4.20950 4.17113	1.51393 2 1.50010 1.48640 1.47283 1.45938 1.44606 1.43287 1.41980 1.40686 1.39403	1.4636 - 3 1.4696 1.4558 1.4421 1.4286 1.4152 1.4019 1.3887 1.3757	1.9400 - 2 1.9217 1.9037 1.8658 1.8650 1.8505 1.8331 1.8159 1.7820
95000 95200 95400 95400 95800 96800 96200 96400 96400 96400	94569 94767 94966 95164 95362 95560 95758 95956 96155 96353	405.854 405.963 406.072 406.187 406.289 406.398 406.507 406.616 406.724 406.833	-53.816 -53.707 -53.598 -53.589 -53.381 -53.272 -53.163 -53.054 -52.946 -52.837	-47.675 -47.615 -47.555 -47.454 -47.434 -47.373 -47.313 -47.252 -47.192 -47.192	1.39963 + 1 1.38688 1.37425 1.36174 1.34935 1.33707 1.32491 1.31286 1.330092 1.28910	h.13312 - 1. h.095k6 h.095k17 h.02122 3.98k62 3.94836 3.9124k 3.87686 3.84162 3.84162 3.860670	1.38133 - 2 1.36875 1.35628 1.34393 1.33170 1.31958 1.30758 1.29569 1.28391 1.27224	1.3500 - 3 1.3373 1.3248 1.3124 1.3001 1.2879 1.2759 1.2639 1.2521 1.2404	1.7653 - 2 1.7488 1.7324 1.7161 1.7001 1.6684 1.6684 1.6528 1.6373
97000 97200 97400 97400 97800 98000 98200 98400 98400 98800	96551 96749 96947 97145 97343 97542 97740 97938 98136 98334	406.942 407.050 407.159 407.377 407.485 407.594 407.703 407.811 407.920	-52.728 -52.420 -52.511 -52.402 -52.293 -52.185 -52.076 -51.967 -51.859	-47.071 -47.011 -46.890 -46.830 -46.769 -46.769 -46.588 -46.588	1.27738 + 1 1.26578 1.255428 1.25429 1.23162 1.22044 1.20937 1.19840 1.18754 1.17678	3.77211 - 1 3.7378k 3.70390 3.67027 3.63696 3.60396 3.57127 3.53888 3.50680 3.47502	1.26068 - 2 1.24923 1.23788 1.22664 1.21551 1.20448 1.19356 1.18273 1.17201 1.16139	1.2288 - 3 1.2173 1.2059 1.1947 1.1835 1.1725 1.1615 1.1507 1.1309 1.1293	1.6068 - 2 1.5918 1.5769 1.5622 1.5476 1.5188 1.5046 1.4767
99000 99200 99400 99400 99800 100000 100200 100400 100600 100600	98532 98730 98928 99127 99325 99523 99721 99919 100117 100315	408.029 408.137 408.246 408.355 408.463 408.572 408.681 408.790 408.898 409.007	-51.641 -51.533 -51.424 -51.315 -51.207 -51.098 -50.989 -50.880 -50.772 -50.663	-46.467 -46.347 -46.347 -46.286 -46.226 -46.105 -46.105 -46.7045 -45.924	1.16611 + 1 1.15555 1.14509 1.13472 1.12445 1.11428 1.10420 1.09421 1.08432 1.07452	3.44353 - 1 3.41238 3.38144 3.35083 3.32050 3.29086 3.26070 3.23121 3.20200 3.17306	1.15086 - 2 1.14044 1.13011 1.11988 1.10975 1.09971 1.08976 1.07990 1.07014 1.06047	1.1188 - 3 1.1083 1.0980 1.0878 1.0776 1.0676 1.0577 1.0478 1.0381	1.4629 - 2 1.4493 1.4358 1.4224 1.4092 1.3990 1.3830 1.3702 1.3574 1.3448
101000 101200 101400 101400 101800 102000 102200 102200 102400 102600	100513 1007:11 100909 101107 101305 101504 101702 101900 102098 102296	409.116 409.224 409.333 409.455 409.550 409.659 409.768 409.985 410.094	-50.554 -50.446 -50.337 -50.228 -50.120 -50.011 -49.794 -49.685 -49.576	- 45.864 - 45.803 - 45.743 - 45.622 - 45.622 - 45.502 - 45.501 - 45.381 - 45.320	1.06481 + 1 1.05520 1.04567 1.03623 1.02688 1.01761 1.00843 9.99340 + 0 9.90332 9.81407	3.14439 - 1 3.11599 3.08786 3.05998 3.03236 3.00501 2.97790 2.95105 2.92445 2.89809	1.05089 - 2 1.04140 1.03199 1.02268 1.01345 1.00345 9.95246 - 3 9.86272 9.77381 9.68574	1.0189 - 3 1.0094 1.0000 9.9073 - 4 9.8152 9.7221 9.6338 9.5444 9.4559 9.3682	1.3323 - 2 1.3199 1.3077 1.2955 1.2835 1.2716 1.2597 1.2481 1.2365 1.2250
103000 103200 103400 103600 103800 104000 104200 104400 104600 104600	102494 102692 102890 103088 103286 103484 103682 103680 104078	410.202 410.311 410.419 410.528 410.637 410.745 410.963 411.071	-49.468 -49.359 -49.251 -49.142 -49.033 -48.816 -48.707 -48.599 -48.490	- 45.260 - 45.200 - 45.39 - 45.079 - 45.078 - 44.958 - 44.837 - 44.777 - 44.777	9.72565 + 0 9.63806 9.55127 9.46529 9.38010 9.29572 9.21211 9.12928 9.04722 8.96591	2.87198 - 1 2.84612 2.82049 2.79510 2.74599 2.74502 2.72033 2.69587 2.67164 2.64763	9.59847 - 3 9.51202 9.42637 9.34151 9.25744 9.17416 9.09165 9.00990 8.92891 8.84867	9.2813 - 4 9.1953 9.1101 9.0257 5.9421 8.8593 8.7773 8.6961 8.6961 8.6156	1.2137 - 2 1.2024 1.1913 1.1802 1.1693 1.1585 1.1577 1.1371 1.1266 1.1162
105000 105500 106000 106500 107000 107500 108500 108500 109500	104474 104969 105464 205959 106454 106949 107444 107938 108433 108928	411.289 411.560 412.303 413.063 413.823 414.584 415.384 416.104 416.864 417.624	-48.381 -48.110 -47.367 -46.607 -45.847 -45.086 -44.326 -42.806 -42.046	- 44.656 - 44.505 - 44.693 - 43.670 - 43.248 - 42.826 - 42.803 - 41.981 - 41.559 - 41.136	8.88537 + 0 8.68724 8.49377 8.30497 8.12070 7.94086 7.745533 7.59400 7.42676 7.26350	2.62385 - 1 2.56534 2.56821 2.45246 2.39804 2.34494 2.24251 2.14251 2.14312 2.14491	8.76918 - 3 8.57364 8.38270 8.19636 8.01451 7.83702 7.66379 7.49469 7.32964 7.16852	8.4570 - 4 8.2630 8.0644 7.3707 7.6819 7.3188 7.3188 7.1443 6.9742	1.1059 - 2 1.0805 1.0545 1.0292 1.0045 9.8046 - 3 9.5703 9.3421 9.1197 8.9030
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TABLE IV.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude	Т	emperatur	e ;		Pressure		Den	sity
H, ft	Z, ff	T,°R	t,°F	t,°C	P, mb	P, in Hg	<u>P</u> P°	ρ, lb ft ⁻³	<u>ρ</u> Ρ _ο
110000 110500 111000 1117500 112500 112500 113500 114000 114500	110583 111089 111594 112099 112605 113 [10 113616 114121 114627 115132	419.271 420.039 420.807 421.575 422.343 423.612 424.648 424.648 425.416	-40.399 -39.631 -38.863 -38.095 -37.327 -36.558 -35.790 -35.790 -35.254 -33.486	-40.222 -39.795 -39.368 -38.915 -38.088 -37.661 -37.235 -36.808	6.92297 + 0 6.77008 6.62084 6.47515 6.33292 6.19407 6.05850 5.92614 5.79691 5.67071	2.04435 - 1 1.99920 1.95513 1.91211 1.87011 1.82911 1.78908 1.74999 1.71183 1.67456	6.83244 - 3 6.68155 6.53426 6.39047 6.25011 6.11307 5.97928 5.84865 5.72110 5.579656	6.4638 - 4 6.3095 6.1591 6.6126 5.8699 5.7307 5.5952 5.4630 5.3342 5.2087	8.4522 - 3 8.2505 8.0539 7.8623 7.6756 7.24937 7.3164 7.1436 6.9752
115000 115500 116500 116500 117500 117500 118500 119000 119500	115638 116143 116649 117155 117660 118166 118672 119177 119683 120189	426.952 427.720 428.488 429.256 430.024 430.793 431.561 432.329 433.097 433.865	-32.718 -31.950 -31.182 -30.414 -29.646 -28.877 -28.109 -27.341 -26.573 -25.805	-35.954 -35.528 -35.101 -34.674 -34.248 -33.891 -32.967 -32.967 -32.114	5.54749 + 0 5.42715 5.30964 5.19487 5.08278 4.97331 4.86638 4.76193 4.65991	1.63817 - 1. 1.60264 1.56793 1.53404 1.50094 1.46862 1.43704 1.40620 1.37607 1.34664	5.47494 - 3 5.35618 5.24020 5.12694 5.01631 4.90827 4.80274 4.69966 4.59897	5.0864 - 4 4.9671 4.8508 4.7375 4.6270 4.5193 4.4142 4.3118 2.2119 4.1146	6.4951 = 3 6.4951 6.3431 6.1949 6.0504 5.9095 5.7722 5.6382 5.5077 5.3803
120000 120500 121500 121500 122500 122500 12300 123500 124500	120695 121200 121706 122212 122718 123724 123730 124236 124742 125248	434.633 435.401 436.169 436.937 437.705 438.474 439.242 440.010 440.778 441.546	-25.037 -24.269 -23.501 -22.733 -21.965 -21.196 -20.420 -19.660 -18.892 -18.124	-31.687 -31.260 -30.834 -30.980 -29.980 -29.554 -29.127 -28.700 -28.273 -27.847	4.46288 + 0 4.36776 4.27784 4.18405 4.09534 4.00866 3.92396 3.84120 3.76032 3.68128	1.31789 - 1 1.28980 1.26236 1.23555 1.20935 1.18376 1.15875: 1.13431 1.11042 1.08708	4.40452 - 3 4.31065 4.21894 4.12933 4.04178 3.95628 3.87265 3.779097 3.71115 3.63314	4.0196 4 3.9270 3.8367 3.7486 3.6627 3.5789 3.497.1 3.4174 3.3396 3.2637	5.2561 - 3 5.1350 5.0169 4.9018 4.7894 4.6798 9.5729 4.4687 4.3670
125000 125500 126500 126500 127500 127500 128500 129500 129500	125754 126260 126766 127272 127778 128284 126791 129297 129803 130309	442.314 453.082 443.850 444.618 445.386 456.154 446.923 447.691 448.459 449.227	-17.356 -16.588 -15.820 -15.052 -14.284 -13.516 -12.747 -11.979 -11.211	-27.420 -26.993 -26.567 -26.140 -25.713 -25.286 -24.860 -24.433 -24.006 -23.580	3.60404 + 0 3.52855 3.45476 3.38264 3.31215 3.24324 3.17589 3.11004 3.01.567 2.94273	1.06427 - 1 1.04198 1.02019 9.98894 - 2 9.78077 9.57729 9.37838 9.18394 8.99365 8.80801	3.55691 - 3 3.48240 3.40958 3.33841 3.26884 3.20083 3.13435 3.06937 3.00584 2.94373	3.1897 - 4.3 3.1175. 3.0470 2.9782 2.9111 2.8857 2.7618 2.7194 2.6586	4.1769 - 3 4.0765 3.9045 3.8945 3.8047 3.72.11 3.6375 3.5560 3.4764 3.3988
130000 130500 131000 131500 132500 132500 133500 134000 134500	130816 131322 131828 132335 132841 133854 133854 134360 134867	449.995 450.763 451.531 452.299 453.067 453.835 454.604 455.372 456.140 456.905	-9.675 -8.139 -7.371 -6.603 -5.835 -5.266 -4.298 -3.530	-23.153 -22.726 -22.299 -21.873 -21.446 -21.019 -20.592 -20.166 -19.739 -19.312	2.92120 + 0 2.86105 2.80223 2.74471 2.68848 2.63348 2.57970 2.52711 2.47568 2.42537	8.62631 - 2 8.44867 8.27498 8.10514 7.93907 7.77667 7.61786 7.46256 7.31067 7.16213	2.88300 - 3 2.82363 2.76558 2.70882 2.55332 2.59905 2.54597 2.49407 2.44330 2.39366	2.5412 - 4 2.4847 2.4294 2.3755 2.3729 2.3715 2.2214 2.1724 2.1724 2.0780	3.3230 - 3 3.2490 3.1768 3.1063 3.0375 2.9048 2.0408 2.77782 2.7172
135000 135500 136000 136500 137000 137500 138500 139000 139500	135880 136386 136893 137399 137906 138413 136919 139426 139933	457.676 458.444 459.212 459.748 460.748 461.516 462.284 463.053 463.821 464.589	-1.994 -1.226 -0.458 0.310 1.078 1.846 2.614 3.383 4.151 4.919	-18.886 -18.459 -18.032 -17.605 -17.179 -16.752 -15.899 -15.472 -15.045	2.37618 + 0 2.32805 2.28099 2.23494 2.18991 2.14585 2.10275 2.06059 2.01934 1.97898	7.01684 - 2 6.87474 6.73575 6.59979 6.46680 6.33670 6.20942 6.08491 5.96310 5.84392	2.34510 - 3 2.29761 2.25116 2.20572 2.16127 2.11779 2.07525 2.03364 1.99293 1.95310	2.0324 - 4 1.9879 1.9445 1.9020 1.8606 1.8201 1.7806 1.7420 1.7043 1.6675	2.6576 - 3 2.59% 2.59% 2.5826 2.4872 2.4830 2.38801 2.3284 2.2779 2.2286 2.1805
140000 140500 141000 141500 142000 142500 143500 143500 144500	140946 141453 141960 142467 142974 143987 144494 145001 145508	465.357 466.125 466.893 467.661 468.429 469.197 569.965 470.734 471.502 472.270	5.687 6.453 7.223 7.991 9.759 9.527 10.295 11.064 11.832 12.600	-14.618 -14.192 -13.765 -13.338 -12.912 -12.485 -12.058 -11.631 -11.205 -10.778	1.939k9 + 0 1.90085 1.86305 1.82606 1.78986 1.758k3 1.71977 1.6858k 1.65263 1.6201k	5.72731 - 2 5.61322 5.50158 5.39234 5.2854 5.18084 5.07846 4.97828 4.88023 4.78426	1.91413 - 3 1.87400 1.83809 1.80218 1.76645 1.73149 1.69728 1.66379 1.66379 1.63102	1.6315 - 4 1.5964 1.5621 1.5285 1.4958 1.4638 1.4325 1.4019 1.3721	2.1334 - 3 2.0875 2.0426 1.9987 1.9559 1.9141 1.8732 1.8332 1.7942
145000 145500 146500 146500 147000 147500 148500 148500 149500	146015 146522 147029 147537 148044 148551 149058 149565 150072 150580	473.038 473.806 474.574 475.342 476.110 476.878 477.046 478.414 479.183	13.368 14.136 14.904 15.672 16.440 17.208 17.976 18.745 19.513 20.281	-10.351 -9.924 -9.498 -9.071 -8.644 -8.218 -7.791 -7.364 -6.937 -6.511	1.58833 + 0 1.55720 1.552672 1.49689 1.46769 1.43911 1.41113 1.38373 1.35691 1.33065	4.59840 4.59840 4.50841 4.42033 4.33410 4.24969 4.16705 4.08616 4.00695 3.92941	1.56756 - 3 1.53683 1.50676 1.47732 1.44850 1.42029 1.39267 1.36564 1.33517 1.31325	1.3144 - 4 1.2856 1.2593 1.2327 1.2068 1.1813 1.1555 1.1565 1.1085	1.7188 - 3 1.6824 1.6468 1.6120 1.5780 1.5488 1.5123 1.4805 1.4495 1.4192
,			. April						

TABLE IX — Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	ude	T	emperature	9		Pressure		Den	sity
Z, ft	H, ff	T, °R	t,°F	t,°C	P, mb	P, in Hg	<u>P</u> P _o	ρ, lb ft ⁻³	<u>ρ</u> Ρ _ό
110000 110500 111000 111500 112000 112500 113500 114500	109423 109918 1-10412 1-10907 1-1-1402 1-1402 1-	418.384 419.144. 419.904 420.664 421.424 422.944 422.944 423.704 424.464 425.223	-41.286 -40.526 -39.766 -39.006 -38.246 -37.486 -36.726 -35.966 -35.206	-40.714 -40.292 -39.870 -39.448 -39.025 -38.603 -38.181 -37.759 -37.337 -36.915	7.10413 + 0 6.94854 6.79664 6.64833 6.50353 6.536213 6.22407 6.08924 5.95758 5.82900	2.09785 - 1 2:05190 2.00705 1.96325 1.92049 1.87874 1.83797 1.77815 1.75927 1.72130	7.01123 - 3 6.85768 6.70776 6.56139 6.41848 6.27894 6.14268 6.00962 5.87967 5.75277	6.6470 - 4 6.4896 6.3363 6.1868 6.041.1 5.8992 5.7608 5.6259 5.4944 5.3662	8.6918 - 3 8.4860 8.2855 8.0901 7.7139 7.7139 7.5330 7.3566 7.1846 7.0170
115000 115500 116000 116500 117000 117000 118500 119000 119500	114369 114864 115356 115853 116347 116842 117336 117830 118325 118819	425.983 426.743 427.502 428.262 429.022 429.781 430.541 431.300 432.060 432.819	-33.687 -32.927 -32.168 -31.408 -30.648 -29.889 -29.129 -28.370 -27.610 -26.851	-36.493 -36.071 -35.649 -35.227 -34.805 -34.383 -33.961 -33.539 -33.117 -32.695	5.70342 + 0 5.5077 5.46097 5.34395 5.22965 5.11800 5.00892 4.90237 4.79826 4.69655	1.68422 - 1: 1.64800 1.61262 1.57807 1.51432 1.51134 1.47913 1.44767 1.41693 1.38689	5.62884 - 3. 5.50779 5.38956 5.27407 5.16127 5.05107 4.94342 4.83826 4.73551 4.63513	5.2412 - 4 5.1194 5.0006 4.8848 4.7718 4.6617 4.5543 4.4495 4.3474 4.2478	6.8536 - 3 6.6943 6.5389 6.3875 6.2398 6.0958 5.9553 5.8184 5.6848
120000 120500 121000 121500 122000 122500 123500 123500 124000	119313 119808 120302 120796 121290 121785 122279 122773 123267	433.578 434.338 435.097 435.856 436.615 437.374 438.893 439.652 440.411	-26.092 -25.332 -24.573 -23.055 -22.296 -21.536 -20.777 -20.018 -19.259	-32.273 -31.851 -31.430 -31.008 -30.586 -30.164 -29.742 -29.742 -29.899 -28.899	4.59717 + C 4.50006 4.40518 4.31246 4.22185 4.13331 4.04677 3.96219 3.87953 3.79874	1.35754 - 1 1.32887 1.30085 1.27347 1.24671 1.22056 1.19501 1.17004 1.14562 1.12177	4.53705 - 3 4.44122 4.34757 4.25607 4.16664 4.07926 3.99385 3.91038 3.82880 3.74906	4.1506 - 4 4.0558 3.9634 3.8732 3.7652 3.6994 3.6157 5.5340 3.4543 3.3765	5.4275 - 3 5.3035 5.1827 5.0647 4.9497 4.8375 4.7280 4.6212 4.52169 4.153
125000 125500 126000 126500 127000 127500 128500 129000 129500	124255. 124749 125243 125737 126231 126725 1277219 127713 128207 128701	441.170 441.929 442.688 443.447 444.205 444.964 445.723 446.482 447.240 447.999	-18.500 -17.741 -16.982 -16.223 -15.465 -14.706 -13.947 -13.188 -12.430 -11.671	-28.056 -27.634 -27.212 -26.791 -26.369 -25.948 -25.526 -25.105 -24.683 -24.262	3.71976 + 0 3.64256 3.56710 3.49333 3.42121 3.35070 3.28176 3.21436 3.14846 3.08402	1.09844 - 1 1.07565 1.03356 1.03358 1.01028 9.89461 - 2 9.69104 9.49201 9.29740 9.10710	3.67112 - 3 3.59493 3.52045 3.44765 3.37647 3.30688 3.23885 3.17233 3.10729 3.04369	3.3006 - 4 3.2266 3.1543 3.0838 3.0150 2.9178 2.8823 2.8183 2.7558 2.6948	4.3160 - 3 4.2192 4.1247 4.0325 3.9425 3.7689 3.6852 3.6036 3.5238
130000 130500 131000 131500 132500 132500 133500 133500 134500	129195 129688 130182 130676 131170 131663 132157 132651 133144 133638	448.758 449.516 450.275 451.033 451.792 452.550 453.309 454.067 454.025 455.584	-10.912 -10.154 -9.395: -8.637 -7.878 -7.120 -6.361 -5.603 -4.845 -4.086	-23.840 -23.419 -22.997 -22.576 -22.155 -21.733 -21.312 -20.891 -20.469 -20.048	3.02101 + 0 2.95939 2.84020 2.78257 2.72620 2.67107 2.61714 2.56439 2.51280	8.92103 - 2 8.73907 8.56113 8.38710 8.21691 8.05046 7.88765 7.72841 7.57265 7.42029	2.98150 - 3 2.92069 2.86122 2.80306 2.74618 2.69055 2.63614 2.58292 2.53086 2.47994	2.6353 - 4 2.5772 2.5205 2.4651 2.4110 2.3582 2.3066 2.2563 2.2071 2.1591	3.4460 - 3 3.3700 3.2958 3.2234 3.1527 3.0837 3.0162 2.9504 2.8861 2.8233
135000 135500 136000 136500 137000 137500 138500 138500 139000	134 132 134625 135119 135612 136106 136599 137586 138080 138573	456.342 457.100 457.858 458.617 450.133 460.133 460.691 461.649 462.407 463.165	-3.328 -2.570 -1.812 -1.053 -0.295 0.463 1.221 1.979 2.737 3.495	-19.627 -19.205 -18.784 -18.363 -17.942 -17.521 -17.100 -16.678 -16.257 -15.836	2.46233 + 0 2.41295 2.36465 2.31739 2.27116 2.22592 2.18166 2.13836 2.09598 2.05451	7.27125 ~ 2 7.12544 6.98280 6.84326 6.70673 6.57315 6.44245 6.31456 6.18942 6.06697	2.43013 - 3 2.38140 2.33373 2.28700 2.24146 2.19682 2.15313 2.11039 2.06857 2.02764	2.1122 - 4 2.0665 2.0217 1.9781 1.9354 1.8530 1.8133 1.7744 1.7365	2.7620 - 3 2.7022 2.6437 2.5866 2.5308 2.4763 2.4231 2.3211 2.3711 2.3203 2.2706
140000 140500 141000 141500 142500 143500 143500 144000 144500	139066 139560 140053 140546 141040 141533 142026 142519 143012 143506	463.923 464.680 465.438 466.795 467.712 468.469 469.985 470.742	4.253, 5.010 5.768 6.526 7.284 8.042 8.779 9.557 10.315 11.072	-15.415 -14.994 -14.573 -14.152 -13.731 -13.310 -12.889 -12.468 -12.047 -11.627	2.01393 + 0 1.97422 1.93536 1.89732 1.86009 1.82366 1.78799 1.75308 1.71891 1.68546	5.9%714 - 2 5.82987 5.71510 5.60278 5.49285 5.38526 5.27994 5.17686 5.07595 4.97718	1.98760 - 3 1.94840 1.91005 1.87251 1.83577 1.79981 1.76461 1.73016 1.66342	1.6994 - 4 1.6631 1.6278 1.5932 1.5594 1.5264 1.4941 1.4625 1.4317	2.2222 - 3 2.1748 2.1285 2.0833 2.0391 1.9959 1.9537 1.9125 1.8722 1.8328
145000 145000 146000 146500 147500 148500 148500 149500	143999 14492 14498 145978 145971 146957 147450 147943	471.500 472.257 473.015 473.772 474.529 475.287 476.044 476.801 477.559 478.316	11.830 12.587 13.745 14.102 14.859 15.617 16.374 17.131	-11.206 -10.785 -10.364 -9.943 -9.523 -9.102 -8.681 -8.260 -7.840 -7.419	1.65272 + 0 1.62066 1.58928 1.55856 1.52847 1.49902 1.47018 1.44104 1.41429 1.38722	4.88048 - 2 4.78582 4.69314 4.60241 4.51358 4.42661 4.31144 4.25806 4.17740 4.09645	1.63111 - 3 1.59947 1.56850 1.53818 1.50849 1.47942 1.45096 1.42309 1.36908	1.3722 - 4 1.3434 1.3153 1.2878 1.2809 1.2346 1.2090 1.1839 1.1593 1.1593	1.7943 - 3 1.7567 1.7199 1.6839 1.6488 1.6185 1.5509 1.5481 1.5160
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TABLE IV — Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude	To	emperature	•		Pressure		Den	sity
H, ft	Z, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	P P°	ρ, lb ft ⁻³	<u>ρ</u> Ρ _ο
150000 150500 151000 151590 152500 153000 153500 154500 154500	151087 151594 152101 152609 153116 153623 154131 154638 155146 155653	480.719 481.487 482.255 483.023 483.791 484.559 485.327 486.095 486.864 487.170	21.049 21.817 22.585 23.353 24.121 24.889 25.657 26.425 27.194 27.500	-6.084 -5.657 -5.231 -4.804 -4.377 -3.950 -3.524 -3.097 -2.670 -2.500	1.30494 + 0 1.27977 1.25512 1.23098 1.20735 1.18420 1.16154 1.13934 1.11760 1.09631	3.85349 - 2 3.77915 3.70636 3.63509 3.56529 3.47695 3.43002 3.36447 3.30028 3.23739	1-28788 - 3 1-26303 1-23871 1-21488 1-19156 1-16872 1-14635 1-12444 1-10299 1-08197	1.0626 - 4 1.0405 1.0188 9.9764 - 5 9.7698 9.3689 9.1753 8.9861 8.8093	1.3896 - 3 1.3606 1.3322: 1.3045 1.22775 1.2510 1.2251 1.1998 1.1750 1.1519
155000 155500 156000 156500 157500 157500 158000 158500 159000	156161 156668 157176 157683 158191 158699 159206 159714 160222 160729	487.170 487.170 487.170 487.170 487.170 487.170 487.170 487.170 487.170	27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500	-2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500	1.07542 + 0 1.05493 1.03483 1.01511 9.95770 - 1 9.76797 9.58186 9.39930 9.22021 9.04454	3.17571 - 2 3.11520 3.05584 2.99762 2.94051 2.88448 2.82952 2.77561 2.72273 2.67085	1.06135 - 3 1.04113 1.02130 1.00184 9.82749 - 4 9.64024 9.45656 9.27639 9.09964 8.92627	8.6414 - 5 8.4768 8.3153 8.3153 8.1569 8.0014 7.8994 7.5527 7.4088 7.2677	1.1300 - 3 1.1085 1.0866 1.0666 1.0666 1.0264 1.0068 9.8762 - 4 9.6860 9.5034
160000 160500 161000 161000 162000 162500 163500 164000 164500	161237 161745 162253 162761 163268 163776 164284 164792 165300 165808	487.170 487.170 487.170 487.170 487.170 487.170 487.170 487.170 487.170	27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500	-2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500	8.87222 - 1 8.70317 8.53735. 8.37469 8.21512 8.05860 7.90506 7.75444 7.60670 7.46177	2.61996 - 2 2.57005 2.52108 2.47304: 2.42592 2.37970 2.33436 2.28989 2.24626 2.20346	8.75620 ~ 4 8.58936 8.42571 8.26517 8.10770 7.95322 7.80169 7.65304 7.50723 7.36419	7.1292 - 5 6.9934 6.8601 6.7294 6.6012 6.4754 6.3521 6.2310 6.1123 5.9959	9.3224 - 4 9.1447 8.9705 8.7996 8.6319 8.4675 8.3061 8.1479 7.9926 7.8404
165000 165500 166000 16500 167000 167500 168000 168500 169000	166316 166824 167332 167840 168348 168556 169364 169873 170381	487.170 487.170 487.170 487.170 487.170 487.170 487.170 487.170 487.170	27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500	-2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500	7.31960 - 1. 7.18014 7.04333 6.90913 6.77749 6.64836 6.52169 6.39743 6.27554 6.15597	2.16148 - 2 2.12029 2.07989 2.04027 2.060139 1.96326 1.92585 1.88916 1.85317 1.81786	7-22388 - 4 7-08624 6-95123 6-81879 6-68887 6-56142 6-43641 6-31377 6-19348 6-07547	5.8816 - 5 5.7696 5.6596 5.5518 5.4460 5.3422 5.2405 5.1406 5.0427 4.9466	7.6910 - 4 7.5444 7.4007 7.2597 7.1214 6.9857 6.8526 6.7220 6.5739 6.4683
170000 170500 171000 171500 172000 172500 173000 173000 174000	171397 171906 172414 172922 173431 173939 174447 174956 175464 175973	487.170 487.170 486.735 486.186 485.638 485.089 484.541 483.992 483.443 482.895	27.500 27.500 27.065 26.516 25.968 25.419 24.877 24.322 23.773 23.225	-2.500 -2.500 -2.742 -3.046 -3.351 -3.656 -3.966 -4.266 -4.570 -4.875	5.03868 - 1 5.92363 5.81072 5.69985 5.59097 5.48405 5.37906 5.27597 5.17473 5.07533	1.76322 - 2 1.74925 1.71591 1.66316 1.65101 1.61944 1.56844 1.55799 1.52810 1.49874	5.95972 - 4 5.84617 5.73474 5.62531 5.51786 5.41234 5.30872 5.20697 5.10706 5.00896	4.8523 - 5 1.7599 4.6733 4.5893 4.5068 4.4256 4.3458 4.2673 4.1902 4.1144	6.3451 - 4 6.2242 6.1110 6.0012 5.8932 5.7870 5.6827 5.5801 5.4792 5.3801
175000 175500 176000 176500 177500 177500 178000 179000 179500	176481 176990 177498 178007 178515 179024 179533 180041 180550 181059	482.346 481.797 481.249 480.700 480.151 479.603 479.054 478.506 477.957 477.408	22.676 22.127 21.579 21.030 20.481 19.933 19.384 18.836 18.287	-5.180 -5.485 -5.790 -6.094 -6.399 -4.704 -7.009 -7.314 -7.618 -7.923	4.97772 - 1 4.88189 4.78779 4.69541 4.60470 4.51565 4.42822 4.34238 4.25812 4.17539	1.46992 - 2 1.4162 1.41384 1.38655 1.35977 1.33347 1.30765 1.28231 1.25742 1.23299	4.91263 - 4 4.81805 5.72519 4.63401 4.54449 4.45660 4.37031 4.28560 4.20243 4.12079	4.0398 - 5 3.9666 3.8945 3.8237 3.7542 3.6558 3.6185 3.5525 3.4237	5.2826 - 4 5.1868 5.0926 5.0000 4.9091 4.7317 4.6453 4.5464
180000 180500 181000 181500 182500 182500 183500 184500	181567 182076 182585 183094 183602 184111 184620 185129 185638 186147	476.860 476.311 475.762 475.214 574.665 474.116 473.568 473.019 472.470 471.922	17.190 16.641 16.092 15.544 14.995 14.446 13.898 13.349 12.800 12.252	-8.228 -8.533 -8.838 -9.142 -9.447 -9.752 -10.057 -10.362 -10.666	4.09418 - 1 4.01446 3.93620 3.85938 3.78397 3.70995 3.63730 3.56598 3.49599 3.42728	1.20901 - 2 1.18547 1.16236 1.13967 1.11741 1.09555 1.07409 1.05303 1.03236 1.01208	4.04064 - 4 3.96196 3.88472 3.80891 3.73449 3.66144 3.58973 3.51935 3.45027 3.38247	3.3610 - 5 3.2993 3.2387 3.1792 3.1207 3.0632 3.0067 2.9511 2.8966 2.8430	4.3949 - 4 4.3143 4.2351 4.1372 4.0807 4.0807 3.9316 3.8590 3.7876 3.7175
185000 185500 186000 186500 187000 187500 188000 188500 189500	186656 187165 187674 188183 188692 189201 189710 190220 190729 191238	471.373 470.825 470.276 469.727 469.179 468.630 468.081 467.533 466.984 466.435	11.703 11.155 10.606 10.057 9.509 8.960 8.411 7.863 7.314 6.765	-11.276 -11.581 -11.886 -12.190 -12.495 -12.800 -13.105 -13.410 -13.714 -14.019	3.35986 - 1 3.27368 3.22873 3.16499 3.10243 3.04104 2.98080 2.92168 2.86366 2.80673	9.92165 - 3 9.72623 9.53444 9.34620 9.16148 8.98019 8.60229 8.62770 8.45638 8.28827	3.31592 - 4 3.25061 3.18651 3.12360 3.06186 3.00127 2.94182 2.88347 2.82621 2.77003	2.7903 - 5 2.7385 2.6876 2.5885 2.5885 2.5403 2.4929 2.4463 2.4005 2.3556	3.6486 - 4 3.5809 3.5144 3.4491 3.3648 3.3217 3.2598 3.1989 3.1390 3.0802
				2			:		

FTABLE TV.—Continued

GEÖMETRIC ALTITUDE, ENGLISH UNITS

Altit	ude	7	emperature	;		Pressure	·	Den	sity
Z, ft	H, ft	T, °R	⊜ t,°F	t, °C	P, mb	P, in Hg.	P P _o	ρ, lb ft ⁻³	<u>ρ</u> <i>P</i> δ
150000 150500 151000 151500 152500 152500 153000 154500	148929 149422 149914 150407 151393 1513886 152378 152871 153364	479.073 479.830 480.587 481.344 482.858 483.615 484.372 485.129	19.403 20.160 20.917 21.674 22.63 23.188 23.945 24.702 25.459 26.216	-6.998 -6.578 -6.157 -5.316 -5.316 -4.895 -4.475 -4.054 -3.634 -3.213	1.36070 + 0 1.33473 1.30930 1.28440 1.26000 1.23611 1.21271 1.18979 1.16734 1.14535	4.01815 - 2 3.94146 3.86637 3.79282 3.72079 3.65024 3.55024 3.551345 3.44715 3.38220	1.34291 - 3 1.31728 1.29218 1.26760 1.24353 1.21695 1.17423 1.17423 1.15207 1.13037	1.1119 - 4 1.0889 1.0665 1.0446 1.0231 1.0021 9.8163 - 5 9.6157 9.4195 9.2277	1.4539 - 3 1.4239 1.3946 1.3659 1.3379 1.33104 1.2836 1.2574 1.2317 1.2066
155000 155500 156000 156500 157500 157500 158500 159500	153856 155349 155334 155334 155827 156319 156812 157304 157797 158289	486.643 487.170 487.170 487.170 487.170 487.170 487.170 487.170 487.170	26.973 27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500	-2.793 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500	1.12380 + 0 1.10269 1.08199 1.06168 1.04175 1.02219 1.00300 9.84179 - 1 9.65707 9.47582	3.31858 - 2 3.25625 3.19512 3.13513 3.07628 3.01853 2.96187 2.90628 2.85173 2.79821	1.10910 - 3 1.08827 1.00784 1.004779 1.02812 1.00883 9.89889 - 4 9.71309 9.53078 9.35191	9.0400 - 5. 8.8605 8.6943 8.5310 8.3709 8.2138 8.0596 7.9083 7.7599	1.1821 - 3 1.1586 1.1369 1.1155 1.0746 1.0741 1.0539 1.0341 1.0147 9.9566 - 4
160000 160590 161500 161500 162500 163000 163500 164500	158782 159274 159766 160259 160751 161243 161736 162228 162720 163212	487-170 487-170 487-170 487-170 487-170 487-170 487-170 487-170 487-170	27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500	-2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500	9.29799 - 1 9.12350 8.95229 8.78431 8.61948 8.45776 8.29907 8.14337 7.99060 7.84071	2.74569 - 2 2.69417 2.64361 2.59400 2.54533 2.49757 2.45071 2.45071 2.35962 2.31536	9.17640 - 4 9.00419 8.83523 8.66944 6.50677 6.34776 8.19055 8.03688 7.88611 7.73817	7.4713 - 5 7.3311 7.1936 7.0586 6.9261 6.7962 6.6687 6.5436 6.4208 6.3003	9.7697 - 4 9.5864 9.4065 9.2300 9.0568 8.8869 8.7201 8.5565 8.3960 8.2385
165000. 165500 166000 166500 167000 167500 168500 168500 169500	163705 164197 164689 165181 165673 166165 166657 167149 167641	487.170 487.170 487.170 487.170 487.170 487.170 487.170 487.170 487.170	27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500 27.500	-2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500 -2.500	7.69363 - 1 7.54931 7.40771 7.40771 7.26870 7.13245 6.99869 6.86744 6.73866 6.61231 6.48832	2.27193 - 2. 2.22931 2.18750 2.14647 2.10621 2.06671 2.02796 1.98993 1.95261 1.91600	7.59302 - 4 7.45059 7.31085 7.17373 7.03918 6.90717 6.77764 6.65054 6.52584 6.40348	6.1822 - 5. 6.0662 5.7524 5.8403 5.7312 5.6238 5.5183 5.4148 5.3133 5.2136	8.0840 - 4 7.9323 7.7836 7.6376 7.4943 7.3538 7.2159 7.0806 6.9478 6.8175
170000 170500 171000 171500 172500 172500 173000 173500 174500	168625 169117 169609 -70101 170593 171085 171575 172068 172560 173052	487.170 487.170 487.170 487.170 487.170 486.642 486.642 485.563 485.023	27.500 27.500 27.500 27.500 27.500 26.972 26.432 25.893 25.353 24.814	-2.500 -2.500 -2.500 -2.500 -2.793 -3.093 -3.693 -3.992	6.36667 - 1 6.24730 6.13018 6.01526 5.90250 5.79179 5.68305 5.57624 5.47133 5.36828	1.88008 - 2 1.884883 1.81024 1.77631 1.71032 1.67821 1.64666 1.61568 1.58525	6.28341 - 4 6.16561 6.055002 5.93660 5.82531 5.71606 5.60874 5.50333 5.39978 5.29809	5.1159 - 5 5.0200 4.9259 4.8335 4.7429 4.6590 4.5766 4.4956 4.4159 4.3376	6.6897 - 4 5.5643 6.4412 6.3205 6.2020 6.0923 5.9845 5.8786 5.7744 5.6719
175000 175500 176000 176500 177500 177500 178000 178500 179500	173544 174035 174527 175019 175510 176002 176493 176485 177477 177468	483.944 483.405 482.865 482.326 481.786 481.247 480.707 480.168 479.629	24.274 23.735 23.195 22.656 22.116 21.577 21.037 20.498 19.959 19.419	-4.292 -4.592 -4.892 -5.191 -5.491 -6.090 -6.390 -6.690 -6.989	5.26707 - 1 5.16766 5.07002 5.07002 5.97413. 6.87995 6.78745 6.69661 6.60740 6.51979 6.43376	1.55537 - 2 1.52601 1.49718 1.46886 1.44105 1.41373 1.38691 1.36057 1.33469 1.30929	5.19819 - 4 5.100372 5.00372 4.90908 4.81613 4.72485 4.63520 4.54715 4.56069 4.37578	4.2605 - 5 4.1848 4.193 4.0371 3.9651 3.8943 3.8247 3.7562 3.6890 3.6228	5.5712 - 4 5.4721 5.3748 5.2790 5.1848 5.0923 5.0013 4.9118 4.8238 4.7373
180000 180500 181500 181500 182500 182500 183500 184500	178460 178951 179442 179934 180425 180917 181408 181899 182391 182882	478.550 478.011 477.471 476.932 476.393 475.854 475.315 474.776 474.236 473.697	18.880 16.3%1 17.801 17.262 16.723 16.18% 15.6%5 15.106 14.566	-7.289 -7.589 -7.888 -8.188 -8.487 -8.787 -9.086 -9.386 -9.685	4.34927 - 1 4.26631 4.18484 4.10484 4.02628 3.94915 3.87341 3.77904 3.72603 3.65434	1.28434 ~ 2 1.25798 1.23578 1.21216 1.18896 1.16618 1.14382 1.12186 1.10030 1.007913	4.29240 - 4 4.21052 4.13011 4.05116 3.97363 3.89751 3.82276 3.74936 3.6730 3.60655	3.5578 - 5 3.4939 3.4310 3.3692 3.3085 3.2488 3.1901 3.1324 3.0757 3.0199	4.6523 - 4 4.5685 4.4865 4.4057 4.3263 4.1714 4.0960 4.0960 3.9490
18500 18550 18600 18650 187500 187500 18600 186500 189000	183373 183864 184356 184847 185338 185829 186320 186320 186311 187302 187793	473.158 472.619 472.080 471.541 471.002 470.463 469.925 469.386 468.847 468.308	13.488 12.949 12.410 11.871 11.332 10.793 10.255 9.716 9.177 8.638	-10.284 -10.584 -10.683 -11.183 -11.482 -11.781 -12.081 -12.380 -12.680 -12.979	3.58395 - 1 3.51484 3.44700 3.38039 3.31499 3.25080 3.18777 5.12590 5.04517 3.00555	1.05834 - 2 1.03793 1.01790 9.98228 - 3 9.78917 9.59960 9.41349 9.23079 9.05145 8.87539	3.53708 - 4 3.46888 3.40192 3.33618 3.27165 3.20829 3.18609 3.08503 3.02509 2.96625	2.9651 - 5 2.9113 2.8583 2.8583 2.7552 2.7049 2.6555 2.6070 2.5593 2.5124	3.8773 - 4 3.8069 3.7377 3.6696 3.6028 3.5370 3.4724 3.4089 3.3466 3.2852
		Ţ		W4 # = -					

TABLE IX.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altif	ude	. Т	emperature			Pressure		, Den	sity
H, ft	Z, ft	T, °R	t,°F	t, *C	P, mb	P, in Hg	P P°	ρ, lb ft ⁻³	<u>ρ</u> <u> </u> ρο
190000 190500 191000 191500 192500 192500 193500 194600 194500	191747 192256 192766 192766 19375 193784 194294 194803 195312 195322 196331	465.887 465.338 464.790 464.241 463.692 463.144 462.595 462.046 461.498 460.949	6.217 5.668 5.120 4.571 4.022 3.474 2.925 2.376 1.828 1.279	-14.324 -14.629 -14.629 -14.938 -15.543 -15.648 -16.458 -16.762 -17.067	2.75087 - 1 2.75087 - 1 2.64227 2.58749 2.587691 2.48706 2.38816 2.38816 2.38816	8-12331 - 3- 7-96144 7-80261 1-64677 7-49386 7-34384 7-19664 7-05223 6-91054 6-77155	2.71489 - 4 2.66080 2.60771 2.55563 2.55439 2.45439 2.40519 2.35693 2.30958 2.26312	2.3114 - 5 2.2680 2.2254 2.1835 2.1424 2.1020 2.0623 2.0233 1.9850 1.9474	3.0225 - 4 2.9657 2.9100 2.8553 2.8015 2.7486 2.6967 2.6458 2.5957 2.5465
195000 195500 196000 196500 197500 197500 198000 198500 199500	1968#1 197350 197860 198369 198879 199388 199898 200408 200917 201427	460-400 459-852 459-303 458-754 458-206 457-657 457-109 456-560 456-011 455-463	0.730 0.182 -0.367 -0.916 -1.464 -2.013 -2.561 -3.110 -3.659 -4.207	-17.372 -17.677 -17.4982 -18.284 -18.896 -19.201 -19.810 -20.115	2.201-63 2.201-63 2.101-63 2.11-359 2.02-88 2.02-88 2.02-88 1.98737 1.98737 1.868795	6.63518 - 3 6.50141 6.37017 6.24144 6.11515 5.86977 5.75058 5.63367 5.53367	2.21755 - 4 2.17284 2.12898 2.08595 2.04375 2.00235 1.96174 1.92190 1.88263 1.84451	1.9105 - 5 1.8742 1.8386 1.8036 1.7692 1.7354 1.7023 1.6697 1.6377 1.6377	2.4982 - 4 2.4508 2.4042 2.3584 2.3134 2.2693 2.2259 2.1834 2.1415 2.1005
200000 200500 201000 201500 202500 203500 203500 204000 204500	201937 202447 202956 203466 203976 204486 204996 205506 206015 206525	454.914 453.961 452.863 451.766 450.669 449.572 448.474 447.377 446.280 445.182	-4.756 -5.709 -6.807 -7.904 -9.001 -10.098 -11.196 -12.293 -13.390 -14.488	-20.420 -20.950 -21.559 -22.778 -23.388 -23.967 -25.217 -25.826	1.87350 1 1.773678 1.773678 1.765678 1.665678 1.6616578 1.6518000	5.40654. — 3 5.29620 5.18755 5.08147 4.97702 4.67446 4.77378 4.67494 4.57771 4.46266	1.80692 - 4 1.77004 1.73383 1.69828 1.66337 1.62910 1.59545 1.56241 1.52999 1.49815	1.5755 - 5 1.5466 1.5186 1.4911 1.4640 1.4373 1.4111 1.3853 1.3598 1.3548	2.0602 - 4 2.0224 1.9858 1.9498 1.9144 1.8795 1.8452 1.8114 1.7762 1.7455
205000 205500 206000 206500 207500 207500 208000 208500 209500	207035 207545 208055 208565 209075 209586 210096 210606 211116 211626	444.085 442.988 441.891" 440.793 437.502 438.599 437.502 436.404 435.307 434.210	-15.585 -16.682 -17.779 -18.877 -19.974 -21.071 -22.168 -23.266 -24.363 -25.460	-26.436 -27.086 -27.655 -28.265 -28.267 -29.484 -30.074 -31.513 -31.922	1.48634 - 1 1.48527 1.485477 1.394483 1.38545 1.394833 1.280333 1.280333 1.22660	4.38917 - 3 4.29740. 4.20733 4.11893 4.01218 3.94704 3.84350. 5.78152 3.70107. 3.62215	1.46691 - 4 1.43624 1.40614 1.37659 1.34760 1.31914 1.29122 1.26382 1.23694 1.21056	1.3102 - 5 1.2860 1.2622 1.2387 1.2157 1.1930 1.1707 1.1487 1.1271 1.1058	1.7133 - 4 1.6816 1.6505 1.6198 1.5896 1.5600 1.5308 1.5021 1.4738
210000 210500 211000 211500 212000 212500 213500 213500 214000 214500	212136 212647 213157 213157 214177 214177 214688 215198 215709 216219 216729	433.112 432.015 430.918 429.821 428.723 427.626 426.529 425.431 424.334 423.237	-26.558 -27.655 -28.752 -29.849 -30.947 -32.044 -33.141 -34.239 -35.336 -36.433	-32.532 -55.142 -54.751 -34.970 -35.580 -36.190 -36.799 -37.409 -38.018	1.2003h - 1 1.17465 1.12465 1.10037 1.07518 1.05318 1.030778 9.85742 - 2	3.54471 - 3 4.46874 3.39421 3.32110 3.22938 3.17903 3.17903 3.11003 3.04235 2.97598 2.97598	1.18468 - 4 1.15929 1.13438 1.10994 1.08598 1.06246 1.03940 1.01679 9.94605 - 5	1.0849 - 5 1.0644 1.0442 1.0243 1.0047 9.8550 - 6 9.6659 9.4800 9.2971 9.1174	1.4187 - 4 1.3918 1.3654 1.3394 1.3138 1.22887 1.2639 1.2396 1.2157
215000 215500 216000 216500 217500 217500 218000 218500 219000 219500	217240 217750 218261 218771 219282 219793 220303 220814 221324 221835	422-140 421-042 419-945 418-848 417-750 416-653 415-556 414-459 413-361 412-264	-37.530 -38.628 -39.725 -40.822 -41.920 -43.017 -44.114 -45.211 -46.309 -47.406	-38.628 -39.284 -39.847 -40.457 -41.676 -42.286 -42.286 -42.505 -44.114	9.64127 - 2 9.42932 9.22149 9.01771 8.81792 8.43004 8.24180 8.05729 7.87643	2.84707 - 3 2.78448 2.72310 2.66293 2.60393 2.54609 2.48939 2.48939 2.43380 2.37932 2.37932	9.51519 - 5 9.30601 9.30601 9.30090 8.89979 8.70261 8.50931 8.31980 8.13403 7.95193 7.77344	8.9406 - 6 8.7669 8.5960 8.4281 8.2630 8.1008 7.9413 7.7845 7.6304 7.4790	1.1691 - 4 1.1240 1.1240 1.1021 1.0805 1.0593 1.0384 1.0179 9.9778 - 5 9.7798
220000 220500 221000 221500 222500 223500 223500 223500 224500 224500	222346 222857 223367 223878 224389 224900 225411 225921 226432 226943	411.167 410.070 408.972 407.875 406.778 405.680 404.583 403.486 402.389 401.291	-48.503 -49.600 -50.698 -51.795 -52.692 -53.990 -55.087 -56.184 -57.281 -58.379	-44.724 -45.943 -45.943 -46.553 -47.772 -48.382 -49.601 -50.210	7.69917 m 2 7.52544 7.35518 7.18433 7.02463 6.807465 6.55366 6.55319 6.25558	2.27356 - 3 2.22226 2.17198 2.12271 2.07443 2.02712 1.98077 1.93535 1.87086 1.84727	7.59849 - 5 7.42703 7.25900 7.09433 6.93297 6.77486 6.61994 6.46816 6.31945 6.17378	7.3302 - 6 7.1840 7.0403 6.8991 6.7603 6.6240 6.4901 6.3586 6.2293 6.1024	9.5852 - 5 9.3940 9.2061 9.0214 8.8400 8.6618 8.4867 8.3146 8.11456 7.9796
225000 225500 226000 226500 227500 227500 228000 228500 229500	227454 227965 228476 228987 229498 230009 230521 231032 231543 232054	400-194 399-097 397-999 396-902 395-805 394-708 393-610 392-513 391-416 390-318	-59.476 -60.573 -61.671 -62.768 -63.865 -64.962 -66.060 -67.157 -68.254 -69.352	-50.820 -51.430 -52.039 -52.649 -53.258 -53.478 -55.087 -55.697 -56.306	4,11098 - 2 5,96935 5,69475 5,69476 5,43136 5,30374 5,10376 5,05644	1.80457 - 3 1.76275 1.72178 1.68166 1.64236 1.60388 1.56619 1.52929 1.49316 1.45779	6.03107 - 5 5.89129 5.75437 5.62028 5.48895 5.36033 5.23439 5.11106 4.99031 4.87208	5.9777 - 6 5.8552 5.7349 5.6167 5.5007 5.3867 5.2748 5.1649 5.0570 4.9511	7.8166 - 5 7.6564 7.4991 7.3446 7.1928 7.0438 6.8975 6.7538 6.6127 6.4742
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TABLE IV.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

ft T, °R 284	**, ° F 8.099 7.561 7.022 6.483 5.944 8.3790 3.251 2.713 2.713 2.7174 1.636 1.097 0.559 0.021 -0.518 -1.056 -1.595 -2.133 -2.671 -3.209	13.278 -13.577 -13.577 -14.176 -14.475 -15.373 -15.672 -15.672 -15.672 -17.766 -18.065 -17.467 -18.065 -18.065 -18.065 -18.065 -18.065 -18.065 -18.065 -18.065 -18.065 -18.065 -18.065 -18.065 -18.065 -18.065 -18.065 -18.065	P, mb 2.94703 - 1 2.88958 2.88319 2.777785 2.72352 2.47020 2.61786 2.51608 2.46660 2.41804 - 1 2.37038 2.32361 2.27772 2.23268 2.18888 2.18888	P, in: Hg 8.70257 - 3 8.53293 8.36442 8.04255 7.08508 7.75054 7.757885 7.12977 7.28386 7.14047 - 3 6.96744 6.86163 6.59309	PPO 2.90849 - 4 2.95180 2.79615 2.74152 2.68790 2.63528 2.53293 2.53293 2.43318 2.43318 2.43344 2.33642 - 4 2.33642 - 4 2.27323 2.24793 2.24793 2.24793	2.4663 - 5 2.4210 2.3765 2.3328 2.2878 2.2475 2.1653 2.1252 2.0058 2.0472 - 5 2.0092 1.9718 1.9351	Po Po Po Po Po Po Po Po Po Po Po Po Po P
775 467.230 266 466.692 757 466.153 248 465.614 739 465.674 721 465.377 721 465.398 462.921 173 462.921 173 462.921 173 462.938 184 461.844 175 461.306 460.757 156 460.229 1473.47 159.690 1458.9152 188 458.614 198 458.075 199 457.537	7.561 7.022 6.483 5.944 5.406 4.867 4.328 3.790 3.251 2.713 2.714 1.636 1.097 0.559 0.021 -0.518 -1.056 -1.595 -2.133	-13.577 -13.877 -14.176 -14.475 -15.074 -15.373 -15.672 -15.971 -16.271 -16.869 -17.160 -17.467 -17.467 -18.365 -18.365	2.88958 2.83319 2.77785 2.772352 2.67020 2.61786 2.556649 2.51608 2.46660 2.41804 - 1 2.37038 2.32361 2.22772 2.23268 2.18848 2.18511	8-3243 8-3642 8-2029 8-0425 7-88508 7-7505 7-57885 7-1297 7-24366 7-14047 - 3 6-9974 6-9974 6-59309	2.05180 2.79615 2.74152 2.68790 2.63528 2.53293 2.435293 2.43539 2.43434 2.33494 2.2379323 2.247932	2.4210 2.3765 2.3328 2.2878 2.2475 2.2061 2.1653 2.1252 2.0858 2.0858 2.0472 - 5 2.0092 1.9718	3-1658 3-1076 3-0504 2-9390 2-8847 2-8314 2-7790 2-7275 2-6272 2-5784 2-5784 2-5304
884 461.884 461.306 460.267 460.229 457.537 458.619 458.075 456.99 456.491 455.922 455.884 455.922 455.884 625.584 6262 458.846	2.174 1.636 1.097 0.559 0.021 -0.518 -1.056 -1.595 -2.133	-16.570 -16.869 -17.168 -17.467 -17.766 -18.065 -18.365	2.37038 2.32361 2.27772 2.23268 2.18848 2.14511	6.99974 6.86163 6.72610 6.59309	2.33939 2.29323 2.24793	2.0092 1.9718 1.9351	2.6272 2.5784 2.5304
59.1 456.461 181 455.922 572 455.384 162 454.846	-3.209		2.10255 2.06078 2.01981	6.46257 6.33449 6.20882 6.08549 5.96448	2.15986 2.11705 2.07505 2.03384 1.09339	1-8637 1-8289 1-7947 1-7611 1-7281	2.4833 2.4370 2.3915 2.3468 2.3029 2.2597
143 452-769 133 451-693 124 450-617 114 449-541	-3.748 -4.286 -4.824 -5.824 -6.901 -7.977 -9.053 -10.129	-19.262 -19.561 -19.860 -20.458 -21.013 -21.611 -22.209 -22.807 -23.405	1.97960 - 1 1.94015 1.90144 1.86346 1.82619 1.78962 1.75370 1.71841 1.66376 1.64972	5.84575 - 3 5.72925 5.61494 5.50279 5.39275 5.39275 5.17866 5.07447 4.97213 4.87163	1.95371 - 4 1.91477 1.87457 1.63909 1.50231 1.75076 1.49594 1.66174	1.6957 - 5 1.6659 1.6326 1.6019 1.5717 1.5162 1.4893 1.4627 1.4366	2.2174 - 4 2.1757 2.1348 2.0947 2.0552 2.0186 1.9827 1.9474 1.9127
104 48.465 195 447.389 146.313 175 445.237 145.237 144.161 145.086 146.934 1	-11.205 -12.281 -13.357 -14.433 -15.509 -16.584 -17.660 -18.736 -19.812 -20.887	-24.003 -24.601 -25.198 -25.796 -26.394 -26.991 -27.589 -28.187 -28.784 -29.382	1.61630 - 1 1.58348 1.55125 3.51960 1.48852 1.45801 1.42805 1.39864 1.36977 1.34142	4.77293 - 3 4.67601 4.58093 4.48737 4.39560 4.30549 4.21703 4.13018 4.04492 3.96121	1.59516 - 4 1.56277 1.53096 1.49973 1.46906 1.43804 1.40938 1.38035 1.35185 1.32388	1.4109 ~ 5 1.3655 1.3606 1.3361 1.3119 1.2881 1.2647 1.2417 1.2111	1.8449 - 4 1.8118 1.7792 1.7471 1.7155 1.6844 1.6538 1.6237 1.5941
106 437.707 196 436.632 186 435.556 176 434.481 166 433.406 187 432.330 186 431.255 186 431.255 186 430.180 180 428.030	-21.963 -23.038 -24.114 -25.189 -26.264 -27.340 -28.415 -29.490 -30.565 -31.640	-29.979 -30.577 -31.174 -31.772 -32.369 -32.966 -33.564 -34.758 -35.356	1.31360 - 1 1.28628 1.25947 1.23316 1.20734 1.18199 1.15712 1.13271 1.10876 1.08525	3.87905 - 3 5.77939 3.71923 3.64153 3.56527 3.49042 3.41697 3.31489 3.27416 3.27416	1.29642 - 4 1.26946 1.24301 1.21704 1.19155 1.16654 1.14199 1.1790 1.09426 1.67106	1.1748 - 5 1.1532 1.1320 1.1111 1.0905 1.0703 1.0503 1.0508 1.0115 9.9254 - 6	1.5362 - 4 1.5080 1.4802 1.4529 1.4260 1.3795 1.3735 1.37479 1.3227
106	-32.715 -33.790 -34.865 -35.940 -37.015 -38.090 -39.164 -40.239 -41.314 -42.388	-35.953 -36.550 -37.147 -37.744 -38.939 -39.536 -40.133 -40.730 -41.327	1.06220 - 1 1.03957 1.01737 9.95595 - 2 9.74231 9.53274 9.32718 9.12554 8.92777 8.73380	3.13664 - 3 3.06485 3.00430 2.93999 2.87690 2.81502 2.75431 2.69477 2.63637 2.57909	1.04831 - 4 1.02598 1.00407 9.82576 - 5 9.61492 9.40809 9.20521 9.00221 8.81103 8.61959	9.7390 - 6 9.5556 9.3752 9.1978 9.0233 8.8517 8.6830 8.5170 7.3558 0.1934	1.2735 - 4 1.2495 1.2259 1.2027 1.1799 1.1575 1.1354 1.1137 1.0924 1.0714
03	-43.463 -44.537 -45.611 -46.686 -47.760 -48.834 -49.909 -50.983 -52.057 -53.131	-41.924 -42.521 -43.714 -44.311 -44.908 -45.505 -46.102 -46.698 -47.295	8.54358 - 2 8.35703 8.17409 7.99471 7.81882 7.64636 7.47728 7.31152 7.14901 6.98972	2.52242 - 3 2.46763 2.41381 2.36084 2.30890 2.25797 2.20804 2.15909 2.1110 2.06406	8,43186 - 5 8.24772 8.04772 7.89016 7.71657 7.54447 7.37950 7.21591 7.05553 6.89831	8.0356 - 6 7.8805 7.7280 7.5781 7.4307 7.2858 7.1434 7.0034 6.8657 6.7305	1.0508 - 4 1.0305 1.0105 9.9093 - 5 9.7166 9.5271 9.3409 9.1578 8.9779 8.8010
987 404.391 177 403.317 106 402.243 401.170 145 400.096 134 399.022 397.948 112 396.875	-54.205 -55.279 -56.353 -57.427 -58.500 -59.574 -60.648 -61.722 -62.795 -63.869	-47.892 -48.488 -49.085 -49.681 -50.278 -50.875 -51.471 -52.068 -52.664 -53.260	6.83357 - 2 6.68051 6.53050 6.38348 5.23939 6.09819 5.95983 5.82425 5.69140 5.56125	2.01795 - 3 1.97275 1.92846 1.88504 1.88249 1.80079 1.75994 1.71990 1.68067 1.640224	6.74421 - 5 6.59315 6.44510 6.30000 6.15780 6.01845 5.88189 5.74808 5.61698 5.48853	6.5976 - 6 6.4649 6.335 6.2124 6.0884 5.9666 5.8469 5.7293 5.6138 5.5003	8.6272 - 5 8.4563 8.2885 8.1235 7.9614 7.8021 7.6456 7.4918 7.3407 7.1923
	85	85	85	85	85	95	955

TABLE TV.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

-Allit	ude		emperatur	,	ALITTO DE,	Pressure	 .	Den	sity
H, ff	Z, ft	°T, °R	1,°F	t,°C	P, mb	P,∍in. Ḥg	P Po	ρ, lb ft ⁻³	<u>ρ</u> Ρο
230000 230500 231000 231500 232000 232500 233500 233500 234500	232565 233076 233588 234099 234610 235122 235633 236144 236656 237167	389.221 388.124 387.027 385.929 384.832 383.735 382.638 381.540 380.443 379.346	-70.449 -71.546 -72.643 -73.741 -74.838 -75.935 -76.032 -78.130 -79.227 -80.324	-56.916 -57.526 -58.135 -58.745 -59.354 -59.964 -60.574 -61.183 -61.793 -62.402	h.81935 - 2 4.70454 4.59215 4.48213 4.37445 4.26906 4.16592 4.06498 3.96621 3.86956	1.42315 - 3 1.38925- 1.35606 1.32357 1.29177 1.26065 1.23019 1.20039 1.17122 1.14268	4.75633 - 5 4.64302 4.53210 4.42352 4.31725 4.21323: 4.11144 4.01182 3.91434 3.81896	4.8471 - 6 4.7450 4.6448 4.5464 4.4498 4.3550 4.2620 4.1707 4.0811 3.9932	6.3382 - 5 6.2047 6.0736 5.9450 5.8187 5.6948 5.5731 5.4537 5.3366 5.2216
235000 235500 236000 236500 237500 237500 236000 238500 239500	237679 238190 238702 239213 239725 240236 240748 241259 241771 242283	378.248 377.151 376.054 374.957 373.859 372.762 371.665 370.567 369.470 368.373	-81.422 -82.519 -83.616 -84.713 -85.611 -86.908 -88.005 -89.103 -90.200 -91.297	-63.012 -63.022 -64.231 -64.841 -65.450 -66.060 -67.279 -67.889 -68.498	3.77500 - 2 3.68249 3.59198 3.50344 3.41684 3.33213 3.24928 3.16825 3.08902 3.01154	1.11476 - 3 1.08744 1.06071 1.03457 1.00899 9.83977 - 4 9.59512 9.35585 9.12186 8.89306	3.72564 - 5 5.63433 3.54501 3.45763 3.37216 3.28856 3.20679 3.12682 3.04862 2.97215	3.9069 - 6 3.8222 3.7392 3.6577 3.5777 3.4993 3.4224 3.3469 3.2729	5.1088 - 5 4.9980 4.8894 4.7829 4.6783 4.5758 4.4752 4.3765 4.2797 4.1848
24000 240500 241500 241500 242500 242500 243500 243500 244500	242794 243306 243818 244330 244842 245355 245865 246377 246889 247401	367.276 366.178 365.081 363.984 362.886 361.789 360.692 359.595 358.497 357.400	-92.394 -93.492 -94.589 -95.686 -96.784 -97.881 -98.978 -100.075 -101.173 -102.270	-69.108 -69.718 -70.937 -70.937 -71.546 -72.156 -72.766 -73.375 -73.985 -74.594	2.93577 - 2 2.86170 2.78928 2.71849 2.54929 2.58164 2.51353 2.45091 2.38777 2.32606	8.66934 - 4 8.45060 8.23675 8.02770 7.82334 7.62358 7.42835 7.23754 7.05107 6.86886	2.89738 - 5 2.82428 2.75281 2.68294 2.61464 2.54788 2.48263 2.41386 2.355654 2.29565	3.1291 - 6 3.0593 2.9908 2.9237 2.8579 2.7934 2.7301 2.6681 2.6073 2.5477	4.0917 - 5 4.0004 3.9109 3.8231 3.7371 3.6527 3.5700 3.4689 3.4094 3.3315
245000 245500 246000 246000 247000 247500 248000 248500 248500 249500	247913 248425 248937 249449 249961 250985 251497 252009 252521	356.303 355.206 354.11 353.01 351.91 350.82 349.72 348.62 347.52 346.43	-103.367 -104.464 -105.56 -106.66 -107.76 -108.85 -109.95 -111.05 -112.15	-75.204 -75.814 -76.42 -77.03 -77.64 -78.25 -78.86 -79.47 -80.08 -80.69	2.26577 - 2 2.20686 2.1493 -20931 2.0382 1.9845 1.9321 1.88310 1.7822	6.69082 - 4 6.51686 6.3469 6.1809 6.0187 5.8603 5.7056 5.5545 5.4069 5.2628	2.23614 - 5 2.17800 2.1212 2.0657 2.0155 1.9586 1.9069 1.8564 1.8071	2.4321 2.4321 2.376 2.321 2.267 2.214 2.163 2.112 2.062 2.014	3.2552 - 5 3.1803 3.107 3.035 2.965 2.896 2.828 2.762 2.697 2.633
250000 250500 251000 251500 252000 252500 253500 254500 254500	253034 253546 254058 254570 255083 255595 256107 256620 257132 257645	345.33 344.23 343.14 342.04 349.94 338.75 337.65 337.65 335.45	-114.34 -115.44 -116.53 -117.63 -118.73 -119.83 -120.92 -122.02 -123.12 -124.22	-81.30 -81.91 -82.52 -83.13 -83.74 -84.35 -84.96 -85.57 -86.18	1.7346 - 2 1.6880 1.6426 1.55983 1.55350 1.5128 1.4716 1.4314 1.3921 1.3538	5.1222 - 4 4.9888 4.85798 4.7198 4.5921 4.4673 4.3856 4.2269 4.1110 3.9979	1.7119 - 5 1.6660 1.6212 1.5774 1.5347 1.4930 1.4524 1.4127 1.3739 1.3361	1.966 - 6 1.920 1.874 1.829 1.785 1.7743 1.701 1.660 1.619 1.580	2.571 - 5 2.510 2.450 2.335 2.279 2.224 2.117 2.066
255000 255500 256000 256500 257500 257500 258500 258500 259500 259500	258157 258669 259182 259694 260207 260720 261232 261745 262257 262770	334.36 333.26 332.16 331.07 329.97 328.87 327.77 326.68 325.58	-125.31 -126.41 -127.51 -128.60 -129.70 -130.80 -151.90 -132.99 -134.09 -134.50	-87-40 -88-01 -88-62 -89-22 -89-83 -90-44 -91-05 -91-66 -92-27 -92-50	1.3165 - 2 1.2800 1.2445 1.2098 1.1760 1.1430 1.1430 1.1430 1.1430 1.0795	3.8876 - 4 3.7800 3.6750 3.5726 3.4727 3.3753 3.2803 3.1877 3.0974	1.2993 - 5 1.2633 1.2282 1.1940 1.1606 1.1281 1.0963 1.0654 1.0352 1.0058	1.541 - 6 1.504 1.467 1.463 1.395 1.361 1.327 1.294 1.224	2.015 - 5 1.966 1.918 1.871 1.824 1.779 1.735 1.691 1.649 1.604
260000 260500 261000 261500 262000 262500 263500 263500 264000 264500	263283 263776 264308 264821 265334 265847 266359 266872 267385 267898	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	9.9015 - 3 9.6202 9.3469 9.0814 8.8234 8.5727 8.3292 8.0926 7.8627 7.6393	2.5236 - 4 2.8409 2.7601 2.6817 2.6055 2.5315 2.4596 2.3897 2.3218 2.2559	9.7721 - 6 9.4944 9.2247 8.9626 8.7080 8.4606 8.2203 7.9867 7.7598 7.5394	1.192 - 6 1.158 1.125 1.093 1.002 1.0032 1.003 9.742 - 7 9.466 9.197	1.559 - 5 1.514 1.471 1.430 1.389 1.350 1.311 1.274 1.238 1.203
265000 265500 266000 266500 267500 267500 268500 269000 269500	268411 268924 269437 269950 270463 270976 271489 272002 272516 273029	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	7.4223 - 3 7.2114 7.0005 6.8075 6.6141 6.4262 6.2436 6.0662 5.8939 5.7264	2.1918 - 4 2.1295 2.0490 2.0102 1.9531 1.8976 1.8437 1.7914 1.7405 1.6910	7.3252 - 6 7.1171 6.9149 6.7184 6.5276 6.3421 6.1620 5.9869 5.8168 5.6516	8-935 - 7 8.682 8-435 8-195 7-962 7-736 7-516 7-303 7-095 6-894	1.168 - 5 1.175 1.103 1.072 1.041 1.012 9.829 - 6 9.550 9.278 9.015
	- <u>.</u>		:	// // //				,	·

TABLE IX.—Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS:

Altif	ude	Т	emperatur	<u></u>	j.	Pressure		Den	sity
Z, ft	H, ft	T, ºR	t,°F	t,°C	P, mb	P, in Hg	P _o	ρ, lb ft ⁻³	<u>P</u>
230000 230500 231000 231500 232000 232900 233000 233500 234000	227491 227980 228469 228469 229447 229936 230425 230914 231403 231892	39%, 728 392, 581 392, 581 391, 508 390, 434 388, 361 388, 288 387, 215 386, 142 385, 069	-64.942 -66.076 -67.089 -68.162 -69.236 -70.389 -71.382 -72.455 -73.558 -74.601	-53.857 -54.453 -55.049 -55.242 -56.838 -57.434 -58.031 -58.031	5.43373 - 2 5.30002 5.18644 5.06658 4.94917 4.83417 4.72155 4.61125 4.50324 4.39747	1.60458 - 3 1.50769 1.53156 1.49616 1.46149 1.42753 1.39427 1.36170 1.32981 1.29857	5.36268 - 5 5.23939 5.11862 5.00032 4.88445 4.77096 4.65980 4.55095 4.44435 4.33997	5.3888 - 5.2793 5.171.7 5.0660 4.9622 4.8603 4.7601 4.6618 4.5653 4.4705	7.0465 - 5 6.9033 - 6 6.7626 6.6244 6.4867 6.3554 6.2245 6.0959 5.9697 5.8457
235000 235500 236000 236500 237500 237500 238000 238500 239000 239500	232381 232870 233359 233848 234337 234825 235314 235803 236292 236780	343-996 382-923 381-850 380-777 377-704 378-632 377-559 376-486 275-414 374-343	-75.674 -76.747 -77.820 -78.893 -79.86 -81.038 -82.111 -83.184 -84.256 -85.329	-59.819 -60.415 -61.011 -61.607 -62.203 -62.799 -63.395 -63.991 -64.587 -65.183	4.29391 - 2 4.19251 4.09324 3.99606 3.90092 3.80778 3.71663 3.62741 3.54009 3.45463	1.26799 - 3 1.23805 1.20873 1.18003 1.15194 1.12444 1.09752 1.07117 1.04539	4.23.776 - 5 4.13769 4.03972 3.94380 3.84990 3.75799 3.66803 3.57997 3.49379 3.49379	4.3774 - 6 4.2860 4.1963 4.1062 4.0217 3.9368 3.8535 3.7717 3.6914 3.6126	5.7240 - 5 5.6045 5.4872 5.3720 5.2589 5.1476 5.0389 4.9320 4.8270 4.7240
240000 240500 241000 241500 242000 242500 243500 243500 244500 244500	237269 237758 238246 238735 239224 239712 240201 240689 241178 241666	373.269 372.196 371.124 370.052 366.979 367.907 366.835 365.763 364.691 363.619	-86.401 -87.474 -85.546 -89.618 -90.691 -91.763 -92.835 -93.907 -94.979 -94.051	-65.779 -66.374 -66.970 -67.566 -68.162 -68.757 -69.358 -70.544 -71.140	3.37101 - 2 3.28910 3.20911 3.13078 3.05414 2.97916 2.90582 2.83408 2.76391 2.69529	9.95458 - 4 9.71294 9.47651 9.24518 9.01887 8.79746 8.56089 8.36989 8.16183 7.95918	3.32693 - 5 3.24617 3.16715 3.08984 3.01420 2.94020 2.96782 2.79702 2.72777 2.66004	3.5353 - 6 3.4594 3.3850 3.3119 3.2402 3.1699 3.1009 5.0332 2.9668 2.9017	4.6229 - 5 4.5237 4.4263 4.3308 4.2370 4.1451 4.0548 3.9663 3.8795 3.7943
245000 245500 246000 246500 247000 247500 248000 248500 248500 249500	242155 242643 243132 243620 244108 244597 245085 245573 246062 246550	362.547 361.475 360.40 359.33 358.26 357.19 356.12 355.04 353.97 352.90	-97.123 -98.195 -99.27 -100.34 -101.41 -102.48 -103.55 -104.63 -105.70 -106.77	-71.735 -72.331 -72.93 -73.52 -74.12 -74.71 -75.31 -75.90 -76.50 -77.09	2.62817 - 2 2.56254 2.4984 2.4356 2.3743 2.3143 2.2556 2.1923 2.0875	7.76099 - 4 7.56718 7.5777 7.1924 7.0112 6.8341 6.6609 6.4916 6.3262 6.1645	2.59380 - 5 2.52903 2.4638 2.3432 2.2840 2.2261 2.1696 2.11.43 2.0602	2.8378 - 6 2.7751 2.714 2.653 2.554 2.536 2.420 2.424 2.369 2.316	3.7108 - 5 3.6288 3.548 3.470 3.392 3.317 3.242 3.169 3.098
250000 250500 251500 251500 252000 252500 253500 253500 254000 254500	247038 247526 248015 248503 248991 249979 249967 250455 250943 251431	351.83 350.76 349.69 348.62 347.54 346.47 345.40 344.33 343.26 342.19	-107.84 -108.91 -109.98 -111.05 -112.13 -113.20 -114.27 -115.34 -116.41 -117.48	-77.69 -78.28 -78.88 -79.47 -80.07 -80.66 -81.26 -81.85 -82.45 -83.05	2.0340 - 2 1.7817 1.9306 1.8807 1.8319 1.7842 1.7377 1.6947 1.6043	6.0065 - 4 5.8520 5.7011 5.5537 5.4096 5.2688 5.1313 4.9958 4.8658 4.7376	2.0074 - 5 1.9558 1.9054 1.8561 1.8079 1.7609 1.7149 1.6700 1.6262	2.263 - 6 2.212 2.161 2.112 2.063 2.016 1.969 1.924 1.879 1.835	2.959 - 5 2.892 2.826 2.761 2.698 2.636 2.575 2.516 2.457 2.400
255000 255500 256000 256500 257000 257500 258500 258500 259000 259500	251919 252407 252895 253383 253871 254359 254847 255335 255822 256310	341.12 340.05 338.98 337.91 336.83 335.76 334.69 333.62 332.55 331.48	-118.55 -119.62 -120.69 -121.76 -122.84 -123.91 -124.98 -126.05 -127.12 -128.19	-83.64 -84.23 -84.83 -85.42 -86.02 -86.61 -87.21 -87.80 -88.40 -88.99	1.5620 2 1.5206 1.4802 1.4407 1.4007 1.3646 1.3278 1.2920 1.2570 1.2229	4.6125 - 4 4.4902 4.3709 4.2544 4.10205 3.9211 3.8153 3.7119 3.6111	1.5415 — 5 1.5007 1.4608 1.4219 1.3838 1.3105 1.2751 1.2269	1.792 - 6 1.750 1.709 1.669 1.630 1.591 1.553 1.516 1.480	2.344 - 5 2.289 2.235 2.182 2.181 2.080 2.031 1.982 1.935 1.888
260000 260500 261000 261500 262000 262500 263500 263500 264000	256798 257286 257774 258261 258749 259237 259724 260212 260699 261187	330.41 329.34 328.27 327.20 326.13 325.17 325.17 325.17 325.17	-129.26 -130.33 -131.40 -132.47 -133.54 -134.50 -134.50 -134.50	-89.59 -90.18 -90.78 -91.37 -91.97 -92.50 -92.50 -92.50 -92.50	1.1895 - 2 1.1570 1.1253 1.0944 1.0642 1.0347 1.0060 9.7814 - 3 9.5103 9.2468	3.5127 - 4 3.4167 3.3230 3.2316 3.1425 3.0555 2.9708 2.8884 2.7306	1.1740 - 5 1.1419 1.1106 1.0800 1.0502 1.0212 9.9287 - 6 9.4535 9.3859 9.1258	1.409 - 6 1.375 1.342 1.309 1.277 1.246 1.211 1.178 1.145 1.113	1.843 - 5 1.798 1.755 1.712 1.670 1.629 1.584 1.540 1.456
265000 265500 266000 266500 267500 267500 268000 268500 269500	261675 262162 262650 263137 263624 264112 264599 265087 265574 266061	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	8.9905 - 3 8.7414 8.4992 8.2637 8.0347 7.8121 7.5957 7.3853 7.1807 6.9818	2.6549 - 4 2.5013 2.5098 2.4403 2.4727 2.3069 2.2430 2.1809 2.1205 2.0617	8,8729 - 6 8.6271 8.3860 8.1556 7.9297 7.7100 7.4964 7.2887 7.0868 6.8905	1.082 - 6 1.052 1.023 9.948 - 7 9.673 9.405 9.144 8.891 8.645 8.405	1.415 - 5 1.376 1.338 1.301 1.265 1.230 1.196 1.163 1.130
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TABLE IV.→Concluded GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude	7	emperatur	e		Pressure		Den	sity
H, ft	Z, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	p p o	ρ, lb ft ⁻³	<u>P</u> Po
270000 270500 271050 271500 272000 272500 273500 273500 274500	273542 274055 274568 2755082 275595 276100 276622 277135 277648 278162	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	5.5638 - 3 5.4057 5.2521 5.1029 4.9579 4.8171 4.6802 4.5473 4.4181 4.2926	1.6430 - 4 1.5963 1.5510 1.5069 1.4641 1.4225 1.3821 1.3428 1.3047 1.2676	5.4910 - 6 5.3350 5.1834 5.0362 4.8931 4.7541 4.6190 4.8878 4.3603 4.2368	6.698: - 7: 6.508 6.323 6.143: 5.969 5.799 5.634 5.474 5.319- 5.168	8.759 - 6 8.510 8.266 8.033 7.305 7.583 7.368 7.158 6.955 6.757
275000 275500 276000 276500 277000 277500 278000 278500 279000 279500	278675 279189 279702 280216 280729 281243 281756 282270 282784 283297	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	4.1706 - 3 4.0521 3.9370 3.8252 3.7165 3.6109 3.5083 3.4087 3.3118 3.2177	1.2316 - 4 1.1966 1.1626 1.1296 1.0975 1.0963 1.0360 1.0066 9.7798 - 5 9.5020	4.1161 - 6 3.9992 3.8855 3.7752 3.6679 3.5637 3.4625 3.3641 3.2685 3.1757	5.021 - 7 4.878 4.740 4.605 4.474 4.324 4.104 3.987 3.874	6.565 6 6.379 6.198 6.022 5.851 5.684 5.523 5.366 5.214 5.065
280000 280500 281000 281500 282500 283500 283500 284500 284500	283811 284325 284838 285352 285866 286380 286894 287408 287921 288435	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	3.1263 - 3 3.0375 2.9512 2.8674 2.7859 2.7068 2.6299 2.5552 2.4826 2.4120	9.2320 - 5 8.9698 8.7149 8.4674 8.2268 7.9931 7.7660 7.5454 7.3310 7.1227	3.0854 6 2.9978 2.9126 2.8299 2.7495 2.6714 2.5955 2.5217 2.4501 2.3805	3.764 - 7 3.657 3.553 3.452 3.354 3.259 3.166 3.076 2.989 2.904	4.922 - 6 4.782 4.686 4.514 4.386 4.386 4.140 4.022 3.908 3.797
285000 285500 286000 286500 287000 287500 288000 288500 289000 289500	286949 289463 289977 290491 291005 291519 292033 292548 293062 293576	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	2.3435 - 3 2.2769 2.2122 2.1494 2.0883 2.0290 1.9714 1.9154 1.8609	6.9204 - 5 -6.7238 6.5328 6.3472 6.1669 5.9917 5.8214 5.6561 5.4954 5.3392	2.3129 - 6 2.2472 2.1833 2.1213 2.0610 2.0025 1.9456 1.8966 1.7844	2.821 - 7 2.741 2.663 2.588 2.514 2.443 2.373 2.373 2.376 2.240 2.177	3.689 - 6 3.584 3.483 3.384 3.287 3.194 3.103 3.015 2.930 2.846
290000 290500 291000 291500 292000 292500 293500 293500 294500	294090 294604 295119 295633 296147 296661 297176 297690 298204 298719	325.17 325.17 325.17 325.75 326.60 327.44 328.28 329.12 329.97	-134.50 -134.50 -134.50 -134.50 -133.92 -133.07 -132.23 -131.39 -130.55 -129.70 -128.86	-92.50 -92.50 -92.50 -92.18 -91.71 -91.24 -90.77 -90.30 -89.84 -89.37	1.7567 - 3 1.7068 1.6583 1.6112 1.5656 1.5214 1.4785 1.4369 1.3967	5.1876 - 5 5.0402 4.8970 4.7580 4.6232 4.4926 4.3660 4.2433 4.1243 4.0090	1.7337 - 6 1.6845 1.6366 1.5902 1.5951 1.5015 1.4502 1.4182 1.3784 1.3398	2.115 - 7 2.055 1.996 1.936 1.876 1.819 1.763 1.709 1.657 1.606	2.765 - 6 2.687 2.611 2.532 2.454 2.378 2.305 2.235 2.167 2.101
295000 295500 294000 294500 297500 297500 298500 299500 299500	299233 299748 300262 300777 301291 301806 302321 302835 303350 303864	331.65 332.49 333.33 334.18 335.02 335.86 336.70 357.54 338.38	-128.02 -127.18 -126.34 -125.49 -124.65 -123.81 -122.97 -122.13 -121.29 -120.45	-88.90 -88.43 -87.96 -87.50 -87.03 -86.56 -86.09 -85.63 -85.16 -84.69	1.3197 - 3 1.2830 1.2474 1.2129 1.1794 1.1469 1.1154 1.0848 1.0551	3.8972 - 5 3.7887 3.5836 3.5816 3.4827 3.3867 3.2937 3.2937 3.2034 3.1158 3.0308	1.3025 - 6 1.2662 1.2311 1.1970 1.1639 1.1319 1.1008 1.0706 1.0413	1.558 = 7 1.510 1.465 1.421 1.378 1.337 1.297 1.258 1.220 1.184	2.037 - 6 1.975 1.915 1.858 1.802 1.748 1.695 1.695 1.596
300000	304379	340.06	-179-61	~84.23	9.9843 - 4	2.9484 - 5	9.8537 - 7	1.149 - 7	1.503 - 6
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TABLE IX.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	huda	7			LITTODE, E			Dan	-14
Aitii	one `		emperatur	c.		Pressure		Den	siry
Z, ft	H, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	P _P °	ρ, lb ft ⁻³	<u>ρ</u> Ρο
270000 270300 271000 271500 272000 272500 273500 273500 274000	266549 267036 267523 268010 268498 268985 269472 269959 270446 270933	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	6.7884 - 3 6.6004 6.4176 6.2359 6.0671 5.8990 5.7357 5.5769 5.4225 5.2723	2.0046 - 4 1.9491 1.8951 1.8426 1.7916 1.7420 1.6937 1.6469 1.6013 1.5569	6.6996 - 6 6.5141 6.3337 6.1583 5.8877 5.8219 5.6607 5.3516 5.2034	8.172 - 7 7.946 7.726 7.512 7.304 7.102 6.905 6.714 6.528 6.347	1.069 - 5 1.039 1.010 9.823 - 6 9.5551 9.286 9.029 8.779 8.536 8.330
275000 275500 276500 276500 277500 277500 277500 278500 278500 279500	271420 271908 272395 272882 273369 273856 274342 274829 275316 275803	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	5-1264 3 h-984h h-8h45 4-7123 h-5819 h-550 h-3317 b-2118 h-0953 3-9820	1.5138 - 4 1.4719 1.4312 1.3915 1.3530 1.3156 1.2792 1.2438 1.2093 1.1759	5.0593 - 6 4.7831 4.6507 4.5217 4.52960 4.2751 4.1568 4.0417 3.9299	6.471 - 7 6.001 5.835 5.673 5.516 5.363 5.215 5.071 4.930 4.794	8.070 - 6 7.847 7.629 7.418 7.213 7.013 6.819 6.630 6.447 6.268
280000 280500 281500 281500 282500 282500 283000 283500 284000 284500	276290 276777 277264 277750 278237 278237 278724 279211 279697 280184 280671	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	3.8718 - 3 3.6605 3.6605 3.5592 3.4607 3.3650 3.2719 3.1814 3.0934 3.0078	1.1433 - 4 1.1117 1.0809 1.0510 1.0219 9.9367 - 5 9.6618 9.3945 9.1347 8.6820	3.8211 - 6 3.7154 3.6126 3.5126 3.5126 3.4154 3.3210 3.2291 3.1398 3.0529 2.9685	4.661 - 7 4.532 4.407 4.285 4.166 4.051 3.939 3.830 3.724 3.621	6.095 - 6 5.762 5.762 5.603 5.448 5.297 5.151 5.008 4.870
285000 285500 286000 286500 287000 287500 288000 288500 289000 289500	281.57 281644 282130 282617 283103 283590 284076 284363 285049 285536	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	2.9246 - 3 2.8837 2.7651 2.6886 2.6142 2.5419 2.4716 2.4033 2.3349 2.2702	8.6363 - 5 8.3974 8.1652 7.9394 7.7198 7.5063 7.2988 7.0070 6.7007	2.8863 - 6 2.8065 - 6 2.7289 2.6534 2.5800 2.5800 2.4393 2.3719 2.37043 2.37043 2.2425	3.521 - 7 3.423 3.329 3.237 3.147 3.060 2.976 2.813 2.813	4.604 - 6 4.477 4.353 4.232 4.115 4.002 3.891 7.783 3.679 3.577
290000 290500 291000 291500 292000 292500 293500 293500 294000 294500	286022 286509 286995 287481 287967 288454 288940 289426 289912 290399	325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17 325.17	-134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50 -134.50	-92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50 -92.50	2.2094 3. 2.1483 2.0890 2.0312 1.9751 1.9205 1.8674 1.3138 1.7656 1.7168	6,52kk 5 6,3kkl 6,1687 5,9982 5,6712 5,6712 5,51kk 5,3620 5,2138 5,0697	2.1805 2.1203 2.0616 2.0046 1.9492 1.8954 1.8430 1.7920 1.7925 1.6944	2.660 - 7 2.586 2.515. 2.845 2.378 2.312 2.248 2.186 2.126 2.126	3.178 - 6 3.382 3.288 3.198 3.109 3.023 2.9%0 2.858 2.779 2.703
295000 295500 296000 296500 297500 297500 298500 298500 299500	290885- 291371 291857 292343 292829 293315 293801 294287 294773 295259	325.17 325.54 326.36 327.17 327.99 328.81 329.63 330.45 331.27 332.09	-134.50 -134.13 -133.31 -132.50 -131.68 -130.65 -130.04 -129.22 -128.40 -127.58	-92.50 -92.30 -91.84 -91.39 -90.93 -90.48 -90.02 -89.57 -89.11 -85.66	1.6694 - 3 1.6232 1.5785 1.5351 1.4930 1.4522 1.4125 1.3741 1.3368 1.3006	4.9296 - 5 4.7934 4.6613 4.5331 4.40882 4.1712 4.0576 3.9475 3.8405	1.6475 - 6 1.6020 1.5579 1.5150 1.4735 1.4332 1.3941 1.3561 1.3193 1.2835	2.010 - 7 1.952 1.893 1.837 1.732 1.729 1.677 1.628 1.580 1.533	2.628 - 6 2.552 2.476 2.402 2.330 2.261 2.193 2.128 2.005 2.005
300000	295745	332.90	-126.77	-88-20	1.2654 - 3	3.7368 - 5	1.2489 - 6	1.488 - 7	1.946 - 6

TABLE IV.—Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS

, R t, F t, C 32.90	P, mb 1.2654 - 3 1.1982 1.1349 1.0752 1.0189 9.6584 - 4 9.1577 8.6852 8.2392 7.8181 7.4204 - 4 7.0447 6.6297 6.3541 6.0368 5.4529 5.1884 4.9302 4.6896 4.4617 - 4 4.2459 4.0414 3.8847 3.6860	2.7043 2.5647 2.4330 2.3087 2.1912 - 5 2.0803 1.9755 1.8764 1.7755 1.6403 1.9755 1.6764 1.7827 1.6741 1.7827 1.6941 1.7827 1.6941 1.8309 1.4559 1.4859 1.4859 1.4859 1.4859 1.4859 1.48657 1.48657 1.3848	1.402 1.321 1.246 1.175 1.108 1.046 9.870 - 8 9.319 8.801 7 8.314 - 8 7.825 7.425 7.020 6.638 6.279 5.941 5.623 5.323 5.040 7 4.774 - 8	P P P P P P P P P P P P P P P P P P P
34.54 -125.13 -87.29 36.18 -123.49 -86.39 37.81 -121.86 -85.48 37.84 -120.23 -84.57 41.07 -118.60 -83.67 42.70 -116.97 -82.76 44.33 -115.34 -81.86 45.96 -115.71 -80.95 47.58 -112.09 -70.15 50.62 -110.47 -70.15 50.62 -100.85 -76.25 52.44 -107.23 -77.35 52.44 -107.23 -77.35 53.67 -104.00 -75.56 57.28 -104.00 -75.56 57.28 -100.79 -73.77 58.88 -100.79 -73.77 58.89 -70.99 58.89 -71.10 55.28 -94.39 -70.22 56.87 -95.98 -71.10 55.28 -94.39 -65.35 56.67 -89.63 56.87 -97.88 -70.22 56.88 -70.99 57.28 -70.99 57.28 -70.99 57.28 -70.99 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.29 -70.29 57.20 -70.20 57.20 -70.	1.1982 1.1349 1.0752 1.0189 9.6584 - 4 9.1577 8.6852 8.2392 7.8181 7.4204 - 4 7.4204 - 4 7.4204 - 4 7.4204 - 4 6.0368 5.4354 4.9302 4.6817 - 4 4.2459 4.0414 3.8477 3.64640 3.4899	3.5383 3.3513 1.1200 3.1750 3.0089 1.0611 3.0089 1.055 2.8521 2.7043 2.5647 2.5547 2.4330 2.1912 2.3087 2.1912 2.3087 2.1912 2.3087 2.1912 2.54258 1.315 2.3087 2.1912 3.3087 2.1912 3.3087 2.1912 3.3087 3.3284 3.3286 3.3316 3.3	1.402 1.321 1.246 1.175 1.108 1.046 9.870 - 8 9.319 8.801 7 8.314 - 8 7.825 7.425 7.020 6.638 6.279 5.941 5.623 5.323 5.040 7 4.774 - 8	1.833 1.728 1.629 1.536 1.449 1.367 1.219 1.121 1.087 ~ 6 1.027 9.709 ~ 7 9.709 ~ 7 8.681 8.211 8.211 7.769 7.353 6.961
50.82 -100.85 -78.25 52.44 -107.23 -77.35 54.05 -107.62 -76.45 55.67 -104.00 -75.56 57.28 -102.39 -74.66 55.88 -100.79 -73.77 60.49 -97.18 -71.99 52.09 -97.58 -71.99 55.68 -94.39 -70.22 65.28 -94.39 -70.23 66.87 -92.80 -69.33 66.87 -92.80 -69.37 70.04 -89.63 -67.57 71.62 -88.65 -66.49 77.20 -86.47 -65.82 77.20 -86.47 -65.82 77.77.79 -88.89 -64.07	7.0447 6.0897 6.3541 6.0368 5.7368 5.4389 5.4884 4.9302 4.6896 4.4617 - 4 4.2459 4.0414 3.8477 3.6640	2:0803 1.9755 6:6022 1.8764 1.7827 1.6641 1.6103 1.5309 1.4559 1.3599 1.3657 1.6258 1.3175 - 5 1.2538 1.1904 1.1934 3:9886	7.856 7.425 7.020 6.638 6.279 5.981 5.623 5.323 5.000	1.027 9.709 - 7. 9.179 8.681 8.211 7.769 7.353 6.961
56.87	4.2459 4.0414 3.8477 3.6640 3.4899	1.2538 4.1904 1.1934 3.9886	4.523	6.571
-17.17 -01.17	3.3248 3.1682 3.0196 2.8787	1.0820 3.6161 1.0306 3.4443 9.8181 6 3.2813 9.3556 8.9168 2.9801 8.5009 2.8411	4.286 4.062 3.851 3.652 3.464 3.286 3.119 2.953	6.242 - 7 5.914 5.604 5.312 5.036 4.775 4.530 4.297 4.078 3.861
33.13	2.7454 - 4 2.6192 2.4996 2.3862 2.2787 2.1768 2.0801 1.9883 1.9012 1.8184	8.1072 - 6 2.7095 - 7.7384 2.5849 7.3812 2.4669 7.0464 6.7291 2.2489 6.1425 2.0529 5.8715 1.9623 5.6142 1.8763 5.3698	7 2.796 - 8 2.648 2.509 2.379 2.256 2.140 2.031 1.928 1.831 1.740	3.656 - 7 3.463 3.281 3.111 2.950 2.799 2.656 4.522 2.395 2.275
09.39	1.7398 - 4 1.6650 1.5940 1.5264 1.4621 1.4009 1.3426 1.2871 1.2383 1.1839	5-1375 - 6 1.7170 - 1.6432 4.7070 1.5731 1.5064 4.3175 1.4429 4.1367 1.3825 3.9647 1.3250 3.6447 3.4960 1.2181 3.4960 1.1684	7 1.65% - 8 1.572 1.495 1.422 1.35% 1.299 1.227 1.169 1.114 1.062	2.162 - 7 2.056 1.955 1.860 1.770 1.685 1.605 1.528 1.456 1.388
35.14	1.1359 - 4 1.0901 1.00464 1.00048 9.6500 - 5 9.2705 8.9081 8.5619 8.2311 7.9150	3.2190 1.0758 3.0901 1.0327	7 1.012 - 8 9.65% - 9 9.210 8 8.789 8.390 8.011 7.652 7.310 6.786 6.678	1.324 - 7 1.262 1.204 1.149 1.097 1.048 1.001 9.559 - 8 9.135 8.732
80.37	7.6129 - 5 7.3239 7.0485 6.7865 6.5370 6.2994 6.0730 5.8570 5.6510 5.4583	2.2481 - 6 7.5133 - 7.2282 2.0814 6.9764 2.0041 6.6778 1.9304 6.4516 1.8602 6.2170 1.7933 5.9935 1.7296 5.7804 1.6687 5.5771 5.3830	8	8.350 - 8 7.981 7.592 7.226 6.882 6.558 6.252 5.964 5.692 5.436
09.60 49.93 9.96 14.72 55.05 12.81 19.84 60.17 15.65 24.95 65.28 18.49 30.05 70.38 21.32 35.14 75.47 24.15 40.23 80.56 26.98	5.2865 - 5 5.0870 8.9154 8.7513 8.3983 8.8880 8.3001 8.1622 8.0300 3.9033	1.5552 - 6	8 3.971 - 9 3.796 3.630 3.473 5.324 3.183 3.049 2.922 2.602	5.193 - 8 4.963 4.786 4.581 4.386 4.162 3.987 3.821 3.664 3.514
5555 5555 663. 663. 663. 663. 663. 663.	194 -9.33 -22.96 20	184	18	18

TABLE IV.—Continued GEOMETRIC ALTITUDE, ENGLISH UNITS

	tude .	7	emperatur	e į	<u>.</u>	Pressure	,	Den	sity
Z, ft	H, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	<u>Р</u> Р ₀	ρ, lb ft ⁻³	<u>ρ</u> <i>Ρ</i> _o
380000 381000 382000 383000 383000 385000 386000 387000 388000 389000	373199 374163 375128 376092 377056 378020 378984 379948 380912 381876	560.49 565.54 570.59 575.62 580.65 585.67 590.68 595.69 600.70 605.69	100.82 105.87 110.92 115.95 120.98 126.00 131.01 136.02 141.03	38.24 41.04 43.64 46.64 49.43 52.22 55.01 57.79 60.57 63.34	3.7817 - 5 3.6650 3.5529 3.4453 3.3419 3.2426 3.1470 3.0551 2.9667 2.8816	1.1167 - 6 1.0823 1.0492 1.0174 9.8668 - 7 9.5753 9.2932 9.0218 8.7607 8.5094	3.7322 - 8 3.6170 3.5065 3.4003 3.2982 3.2002 3.1059 3.0152 2.9279 2.8439	2.579 - 9 2.476 2.378 2.284 2.175 2.111 2.030 1.953 1.880 1.810	3.372
390000 391000 392000 393000 395000 395000 396000 397000 398000 399000	382840 383803 384767 385730 386693 387656 388620 389583 390546 391508	610.68 615.66 620.64 625.61 632.16 642.43 652.69 662.94 673.17 683.40	151.01 155.99 160.97 165.94 172.49 182.76 193.02 203.27 213.50 223.73	66.12 68.88 71.65 74.41 78.05 83.76 89.46 95.15 100.84 106.52	2.7997 - 5 2.7208 2.6447 2.5714 2.5008 2.4331 2.3663 2.3063 2.3063 2.22468 2.1898	8.2675 - 7 8.0344 7.8099 7.5934 7.3849 7.3850 6.9937 6.8104 6.6348 6.4664	2.7631 - 8 2.6852 2.6101 2.5378 2.4681 2.4013 2.3374 2.2761 2.2174 2.1611	1.743 - 9 1.679 1.618 1.560 1.560 1.436 1.375 1.317 1.263 1.212	2.279 - 2.196 2.116 2.040 1.962 1.877 1.798 1.723 1.652 1.585
40000 402000 404000 406000 410000 412000 414000 416000 418000	392471 394396 396321 398246 400170 402094 404017 405940 407863 409785	693.61 714.00 734:36 754.66 774.93 795.16 815:55 835.51 855.63 875.72	233.94 254.33 274.69 294.99 315.26 335.49 355.68 375.84 395.96 416.05	112-19 123-52 134-83 146-11 157-37 168-61 179-82 191-02 202-20 213-36	2.1350 - 5 2.0319 1.9367 1.8484 1.7664 1.69901 1.6190 1.5527 1.4906	6.3047 - 7. 6.0003 5.7189 5.4582 5.2162 4.9910 4.7810 4.5850 4.4016 4.2298	2-1071 8 2-0054 1-9113 1-8242 1-7433 1-6680 1-5979 1-5324 1-4711 1-4136	1.164 - 9- 1.075 9.947 -10 9.228 8.578 7.990 7.457 6.971 6.528 6.123	1.522 1.405 1.301 1.207 1.122 1.045 9.751 9.115 8.536 8.006
420000 424000 424000 426000 428000 430000 432000 434000 436000 438000	411707 413629 415550 417471 419392 421312 423232 425151 427070 428989	895.77 915.80 935.79 955.76 975.71 995.63 1015.52 1035.40 1055.25 1075.09	436.10 456.13 476.12 496.09 516.04 535.96 555.85 575.73 595.58 615.42	224.50 235.63 246.74 257.83 268.91 279.98 291.03 302.07 313.10 324.12	1.3777 - 5 1.3264 1.2781 1.2326 1.1896 1.1490 1.1406 1.0742 1.0397 1.0070	4.0685 - 7 3.9169 3.7743 3.6398 3.5129 3.3930 3.2796 4.1722 3.0704 2.9737	1.3597 - 8 1.3091 1.2614 1.2165 1.1741 1.1340 1.0961 1.0062 1.0261 9.9384 - 9	5.751 -10 5.411 5.097 4.808 4.541 4.294 4.065 3.853 3.656 3.472	7.521 - 7.075 6.665 6.287 5.938 5.615 5.316 5.039 4.781
44000 442000 444000 446000 45000 452000 452000 456000 458000	430907 452825 434743 436600 438577 440494 442410 444326 446241 448156	1094.91 1114.71 1134.49 1154.26 1174.02 1193.77 1213.50 1233.52 1252.93 1272.63	635.24 655.04 674.82 694.59 714.35 734.10 753.83 773.55 793.26 812.96	335.13 346.13 357.12 368.11 379.08 390.05 401.02 411.97 422.92 433.87	9.7591 - 6 9.4633 9.1818 8.9135 8.6578 6.4136 8.1804 7.9575 7.7443 7.5402	2.8819 - 7 2.77945 2.7114 2.6322 2.5566 2.5566 2.4157 2.3499 2.2869 2.2266	9.6315 - 9 9.3596 9.0617 8.7970 8.5845 8.3036 8.0735 7.8535 7.6430 7.4416	3.301 -10 3.142 2.993 2.853 2.722 2.600 2.485 2.376 2.275 2.179	4.317 - 4.108 3.913 3.731 3.560 3.399 3.249 3.107 2.974 2.849
#60000 #62000 #64000 #66000 #65000 #70000 #74000 #76000 #78000	\$50671 \$51985 \$53859 \$55813 \$57727 \$59639 \$61552 \$63868 \$65376 \$67288	1292.32 1312.00 1331.67 1351.33 1370.98 1390.62 1410.24 1429.86 1449.47	832.65 852.33 .72.00 891.66 911.31 930.95 950.57 970.19 989.80 1009.39	444.81 455.74 466.66 477.59 488.50 499.41 510.32 521.21 532.11 542.99	7.3446 - 6 7.1571 6.9772 6.8046 6.6387 6.4793 6.3261 6.1786 6.0366 5.8998	2-1689 - 7 2-1135 2-0604 2-0094 1-9604 1-9133 1-8681 1-8245 1-7826 1-7422	7.2485 - 9 7.0635 6.8860 6.7156 6.5519 6.3946 6.2433 6.0978 5.9576 5.8226	2.088 -10 2.003 1.923 1.847 1.775 1.706 1.642 1.581 1.522 1.467	2.731 - 2.619 2.514 2.415 2.321 2.231 2.147 2.067 1.991 1.918
#80000 #82000 #84000 #86000 #86000 #90000 #92000 #94000 #98000	469199 47.11.10 47.3020 47.49.30 47.68.40 47.68.49 48.659 48.25.67 48.47.6 48.63.63	1488.64 1508.21 1527.75 1547.30 1566.81 1586.31 1605.80 1620.49 1634.83 1649.16	1028.97 1048.54 1068.08 1087.63 1107.14 1126.64 1146.13 1160.82 1175.16 1189.49	553.87 564.74 575.60 586.46 597.30 608.13 618.96 627.12 635.09 643.05	5.7679 - 6 5.6408 5.5182 5.3998 5.2855 5.1750 5.0683 4.9649 4.8647 4.7673	1.7033 - 7 1.6657 1.6295 1.5946 1.5682 1.5282 1.4967 1.4661 1.4365	5.6925 - 9 5.5671 5.4460 5.3292 5.2164 5.1074 5.0920 4.9000 4.8010 4.7050	1.415 -10 1.365 1.317 1.272 1.229 1.188 1.148 1.114 1.061 1.050	1.850 - 1.785 1.722 1.663 1.607 1.553 1.502 1.457 1.414 1.373
500000 502000 504000 506000 510000 512000 514000	488291 490198 492105 494012 495918 497824 499729 501634 503539 505843	1663.48 1677.78 1692.06 1706.31 1720.54 1734.75 1748.93 1763.08 1777.21 1791.31	1203.81 1218.11 1232.39 1246.64 1260.87 1275.08 1289.26 1303.41 1317.54 1331.64	651.01 658.95 666.88 674.80 682.70 690.60 698.48 706.34 714.19 722.02	4.6728 - 6 4.5810 4.4919 4.4053 4.3211 4.2392 4.1596 4.0822 4.3069 3.9337	1.3799 - 7 1.3528 1.3265 1.3009 1.2760 1.2518 1.2283 1.2055 1.1832	4.6117 - 9 4.5211 4.4331 4.3477 4.2646 4.1838 4.1053 4.0289 3.9545 3.8822	1.020 -10 9.905 -11 9.625 9.355 9.095 8.845 8.603 8.370 8.146 7.929	1.333 - 1.295 1.259 1.223 1.189 1.157 1.125 1.095 1.065

TABLE TX.—Continued.

GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	ude	7	emperatur	e.		Pressure	-	Den	sity
Z, ft	H, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	P P	ρ, lb ft ⁻⁸	<u>ρ</u> Ρ _ο
520000 522000 524000 526000 528000 530000 532000 534000 536000 538000	507347 509251 511754 513057 514960 516862 518764 520666 522567 524468	1805.39 1819.45 1833.47 1844.78 1853.70 1862.62 1871.52 1.80.40 1889.27 1898.14	1345.72 1359.78 1373.80 1385.11 1394.03 1402.95 14.11.85 1420.73 1429.60 1438.47	729.85 737.65 745.44 751.73 756.68 761.64 766.58 771.52 776.45	3.8623 - 6 3.7929 3.7253 3.6594 3.55951 3.5322 3.4708 3.4108 3.3521 3.2948	1.1405 - 7 1.1200 1:1001 1.0806 1.0616 1.0431 1.0249 1.0072 9.8788 - 8 9.7295	3.8118 - 9 3.7433 5.6766 3.6115. 3.5480 3.4860 3.4254 5.3662 3.3083 3.2517	7.720 -1.1 7.518 7.323 7.145 6.981 6.822 6.667 6.517 6.370 6.228	1.009 - 9 9.830 -10 9.575 9.343 9.128 8.920 8.718 8.521 8.330 8.144
54000 54200 544000 546000 548000 552000 552000 554000 558000	526368 528268 530168 532067 533966 535865 537764 539662 541559 543456	1907.00 1915.86 1924.71 1933.58 1942.46 1951.36 1960.28 1969.25 1978.24 1990.64	1447.33 1456.19 1465.04 1473.91 1482.79 1491.69 1500.61 1509.58 1518.57 1530.97	786.30 791.22 796.14 801.06 806.00 810.94 815.89 820.88 825.87 832.76	3.2388 - 6 3.1840 3.1304 3.0780 3.0267 2.9766 2.9276 2.8796 2.8327 2.7867	9.5640 - 8 9.4022 9.2440 9.0893 8.9380 8.7900 8.6452 8.5035 8.3649 8.2293	3.1964 - 9 3.1423 3.0895 3.0377 2.9872 2.9377 2.8893 2.8420 2.7956 2.7503	6.090 -11 5.956 5.825 5.698 5.574 5.453 5.336 5.222 5.111 5.004	7.964 -10 7.788 7.617 7.450 7.289 7.131 6.978 6.829 6.683 6.543
\$6000 \$6200 \$6400 \$6600 \$6800 \$7000 \$7200 \$7400 \$7600 \$7800	5+5353 5+7250 5+91+6 5510+2 552937 554833 556727 558622 560516 562410	1996.25 2001.86 2007.46 2013.05 2018.63 2024.21 2029.78 2035.34 2040.89	1536-58 1542-19 1547-79 1553-38 1558-96 1564-54 1570-11 575-67 1581-22 1586-76	835.88 838.99 842.11 845.21 848.31 851.41 851.50 857.59 860.68 663.75	2.7417 - 6 2.6544 2.6544 2.6120 2.5704 2.5297 2.4897 2.4121 2.3744	8.0964 - 8 7.9661 7.8384 7.7132 7.5905 7.4701 7.3521 7.2364 7.1228 7.0115	2.7059 - 9 2.6624 2.6197 2.5778 2.5368 2.4966 2.4966 2.4571 2.4185 2.3805 2.3805	4.906 -11 4.810 4.716 4.625 4.535 4.488 4.363 4.279 4.198	6.415 -10 6.290 6.167 6.048 5.931 5.817 5.705 5.596 5.489 5.385
580000 582000 584000 586000 590000 592000 592000 594000 598000	564303 566196 568089 569981 571873 573765 575656 577547 579437 581328	2051.96 2057.49 2063.01 2068.52 2074.02 2079.51 2085.00 2090.47 2095.94 2101.40	1592-29 1597-82 1603-34 1608-85 1614-35 1619-84 1625-33 1630-80 1636-27 1641-73	866.83 869.90 872.96 876.03 879.06 882.13 885.18 886.22 891.26 894.29	2.3374 - 6 2.3011 2.2655 2.2306 2.1964 2.1628 2.1298 2.0974 2.0657 2.0345	6.9023 - 8 6.7952 6.6901 6.5870 6.4859 6.3866 6.2892 6.1937 6.0999 6.0078	2.3068 - 9 2.2710 2.2359 2.2014 2.1676 2.1345 2.1079 2.0700 2.0386 2.0079	4.040 -11 3.964 3.890 3.817 3.746 3.676 3.608 3.541 3.476 3.413	5.283 -10 5.184 5.086 4.991 4.898 4.807 4.718 4.631 4.546 4.462
600000 602000 604000 606000 612000 612000 614000 616000	583217 585107 586996 588885 590773 592661 594549 596437 598324 600210	2106.85 2112.30 2117.73 2123.16 2128.57 2133.98 2139.39 2144.78 2150.16 2155.54	1647.18 1652.63 1658.06 1663.49 1668.90 1674.31 1679.72 1685.11 1690.49 1695.87	897.32 900.35 903.37 906.38 909.39 912.40 915.40 915.40 921.38 924.37	2.0039 - 6 1.9738 1.9444 1.9154 1.8870 1.8591 1.8591 1.8317 1.8048 1.7784	5.9175 - 8 5.8288 5.7417 5.6563 5.5723 5.4900 5.4091 5.3296 5.2517 5.1751	1.9777 - 9 1.9480 1.9189 1.8904 1.8623 1.6348 1.8078 1.7812 1.7552 1.7552	3,350 -11 3,289 3,230 3,:171 3,114 3,058 3,003 2,950 2,897 2,846	4.381 -10 4.301 4.223 4.147 4.072 3.999 3.927 3.857 3.789 3.721
62000 622000 624000 626000 630000 630000 634000 636000 638000	602097 603983 605868 607753 609638 611523 613407 615291 617175 619058	2160.91 2166.26 2170.99 2174.37 2177.75 2181.13 2184.49 2187.85 2191.21	1701.24 1706.59 1711.32 1714.70 1718.08 1721.46 1724.82 1728.18 1731.54 1734.89	927-35 930-33 932-95 934-83 934-83 940-46 942-32 944-19 946-05	1.7270 - 6 1.7020 1.6774 1.6532 1.6295 1.6295 1.5832 1.5832 1.55006 1.5384 1.5105	5.0998 - 8. 5.0259- 4.9534- 4.8820- 4.8119- 4.7429- 4.6751- 4.6084- 4.5428- 4.4783	1.7044 - 9 1.67.97 1.65.55 1.63.16 1.6085 1.5085 1.5025 1.5402 1.5183	2.796 -11 2.746 2.659 2.658 2.610 2.567 2.525 2.483 2.482 2.402	3.656 -10 3.559: 3.559: 3.471 3.413 3.357 3.301 3.247 3.194
640000 642000 644000 646000 650000 652000 654000 656000 658000	620941 622623 624705 626587 626587 628468 630349 632230 634111 635991 637870	2197.90 2201.24 2204.57 2207.90 2211.22 2214.53 2217.84 2221.14 2221.14 2221.14	1738.23 1741.57 1744.90 1748.23 1751.55 1754.86 1758.17 1761.47 1761.47	947-91 949-76 951-61 953-46 953-31 957-15 958-98 960-82 962-65 964-48	1.4751 - 6 1.4739 1.4532 1.4532 1.4327 1.4126 1.3928 1.3734 1.3543 1.3354	h.4149 - 8 4.3525 4.2912 4.2308 4.1715 4.1131 4.0557 3.9436 3.8889	1.4755 - 9 1.4547 1.4342 1.4140 1.3941 1.3746 1.3554 1.3554 1.3180 1.2997	2.363 -11 2.3287 2.287 2.249 2.213 2.177 2.142 2.108 2.074 2.041	3.090 -10 3.039 2.990 2.991 2.894 2.847 2.801 2.756 2.712
660000 662000 664000 668000 670000 672000 674000 678000	639750 641629 643507 645385 647263 649141 651018 652895 654772 656648	2231.01 2234.29 2237.56 2240.83 2244.08 2247.34 2250.58 2253.62 2257.06 2260.29	1771.3h 1774.62 1777.89 1781.16 1784.41 1787.67 1790.91 1794.15 1797.39 1800.62	966.30 968.12 969.94 971.75 973.56 975.37 977.17 978.97 980.77 982.56	1.2987 - 6 1.2808 1.2632 1.2458 1.2287 1.2119 1.1751 1.1631 1.1474	3.8351 - 8 3.7822 3.7301 3.6789 3.6285 3.5789 3.5300 5.4820 3.4347 3.3882	1.2617 - 9 1.2640 1.2466 1.2295 1.2127 1.1961 1.1798 1.1637 1.1479 1.1324	2.008 -11 1.976 1.945 1.945 1.884 1.884 1.825 1.796 1.768 1.740	2.62610 2.584 2.543 2.503 2.463 2.424 2.386 2.349 2.312 2.276
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TABLE IV.—Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS

Altitude		Temperatur	re		Pressure	·	Den	sity
Z, ft H, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	P P _o	ρ, ib fţ ⁻⁸	$\frac{\rho}{\rho_{o}}$
680000 65852 682000 66039 684000 66227 686000 66402 690000 66787 694000 67351 694000 67351 698000 67351	2266.72 2269.93 2273.13 2276.33 2279.70 2282.70 2285.88 2289.05	1803.84 1807.05 1810.26 1813.46 1816.66 1019.85 1823.03 1826.21 1829.38 1832.55	984.25 986.14 987.92 989.70 991.48 993.25 995.02 996.78 998.55	1-1319 - 6 1-1166 1-1016 1-0860 1-0722 1-0579 1-0438 1-0299 1-0163 1-0028	3.3424 - 8 3.2273 3.2273 3.2530 5.2073 3.1665 3.1240 3.0824 3.0414 3.0010 2.9613	1.1171 - 9 1.1020 1.0872 1.0726 1.0582 1.0441 1.0302 1.0165 1.0030 9.8969 -10	1.713 -11 1.686 1.660 1.634 1.609 1.584 1.560 1.536 1.512 1.489	2.240 -10 2.205 2.171 2.137 2.104 2.072 2.040 2.008 1.978 1.947
700000 67726; 702000 67913; 704000 88287; 708000 68474; 710000 68641; 712000 68848; 714000 69225; 714000 69225; 714000 69225; 714000 69227;	2298.53 2301.67 2304.81 2307.98 2311.07 2314.19 2317.30 2320.41	1835.70 1838.06 1842.00 1845.14 1848.27 1851.40 1854.52 1857.63 1860.74 1863.84	1002.06 1003.81 1005.56 1007.30 1009.04 1010.78 1012.51 1014.24 1015.97	9.8955 - 7 9.7651 9.6366 9.5102 9.3856 9.2030 9.1423 9.10234 8.9062 8.7909	2.9221 - 8 2.8636 2.8457 2.8083 2.7716 2.7354 2.6640 2.6640 2.6300 2.5960	9.7661 -10 9.6374 9.5106 9.3858 9.2629 9.1419 9.0227 8.9054 6.7898 8.6760	1.467 -11 1.444 1.422 1.401 1.380 1.359 1.338 1.318 1.298	1.918 -16 1.888 1.860 1.832 1.803 1.777 1.770 1.724 1.698
720000 69596 722000 69783 724000 69783 724000 701572 726000 705343 730000 70530 732000 707172 734000 710906 734000 710906 734000 710907	2329.69 2332.77 2335.84 2338.91 2341.97 2345.02 2348.07	1866.93 1870.02 1873.10 1876.17 1876.17 1879.24 1882.30 1885.35 1888.40 1891.44 1894.48	1019-41 1021-12 1022-83 1024-54 1026-28 1027-94 1029-64 1031-33 1033-02	8.6773 - 7 8.5655 8.8553 8.3468 8.2398 8.1345 8.0308 7.9286 7.8280 7.7288	2.5624 - 8 2.5294 2.4968 2.4648 2.4332 2.4021 2.3715 2.3116 2.2823	8.5639 -10 8.4535 8.3447 8.2376 8.1321 8.0282 7.9258 7.8250 7.7256 7.6277	1.260 -11 1.241 1.223 1.204 1.187 1.169 1.152 1.135 1.118	1.647 -16 1.623 1.599 1.575 1.552 1.552 1.529 1.506 1.884 1.462 1.441
740000 714631 742000 716502 744000 718361 746000 72023 748000 72209 750000 723955 752000 72582 754000 727686 756000 727686 756000 731410	2360.19 2363.21 2366.22 2369.21 2372.20 2375.20 2378.18 2380.50	1897.50 1900.52 1903.54 1908.55 1909.55 1912.54 1915.53 1918.51 1920.83	1036.39 1038.07 1039.74 1041.42 1043.08 1044.75 1046.41 1048.06 1049.35	7.6311 - 7 7.5349 7.4460 7.3466 7.2545 7.1638 7.0744 6.9863 6.8995 6.8139	2.2535 - 8 2.2250 2.1970 2.1694 2.1423 2.1155 2.0891 2.0631 2.0374 2.0121	7.5313 -10 7.4363 7.3427 7.2505 7.1596 7.0701 6.9819 6.8049 6.8093 6.7248	1.086 -11 1.070 1.054 1.039 1.024 1.009 9.947 -12 9.804 9.666 9.531	1.420 -11 1.399 1.359 1.359 1.339 1.320 1.301 1.262 1.264
760000 733277 762000 735134 764000 736999 766000 736997 770000 74671 770000 744436 774000 746296 774000 786155 778000 750014	2386.58 2388.60 2390.62 2392.62 2394.62 2396.62 2398.61 2400.60	1924.89 1926.91 1928.93 1930.95 1932.95 1934.95 1936.95 1936.94 1940.93	1051-61 1052-73 1053-65 1054-07 1056-08 1057-20 1058-31 1059-41 1060-52 1061-62	6.7295 - 7 6.6465 6.5643 6.4835 6.4037 6.3251 6.2476 6.1712 6.0958 6.0215	1.9872 - 8 1.9627 1.9384 1.9146 1.8910 1.8678 1.8478 1.8223 1.8001 1.7781	6.6415 -10 6.5594 6.4785 5.3987 6.3200 6.2424 6.1659 6.0905 6.0161 5.9427	9.398 -12 9.268 9.139 9.012 8.888 8.765 8.644 8.525 8.408 8.293	1.229 -1 1.212 1.195 1.178 1.162 1.146 1.130 1.115 1.099 1.084
780000 751873 782000 75373 788000 755786 788000 757846 790000 76186 792000 76301 794000 76472 794000 764587 794000 768588	2406.52 2408.49 2410.44 2414.34 2416.29 2418.22	1944.88 1946.85 1948.82 1950.77 1952.73 1954.67 1956.62 1958.55 1960.48 1962.41	1062-71 1063-81 1064-90 1065-99 1067-07 1068-15 1069-23 1070-31 1071-38 1072-45	5.9482 - 7 5.8759 5.8047 5.7344 5.6651 5.5967 5.5293 5.4628 5.3972 5.3325	1.7565 - 8 1.7352 1.7141 1.6934 1.6729 1.6527 1.6328 1.6132 1.5938 1.5747	5.8704 -10 5.7288 5.6594 5.5235 5.4570 5.3214 5.3266 5.2628	8.179 -12 8.067 7.957 7.849 7.742 7.637 7.533 7.431 7.331 7.232	1.070 -1 1.055 1.040 1.026 1.012 9.851 9.851 9.717 9.586 9.457
800000 770436 805000 77507: 815000 77507: 815000 78434 826000 78897: 825000 79359' 835000 79359' 835000 807446' 845000 80746'	2433.52 2438.23 2442.90 2447.54 2452.15 2456.72 2461.26	1964.33 1969.11 1973.85 1978.56 1983.23 1987.87 1992.48 1997.05 2001.59 2006.09	1073.52 1076.17 1078.81 1081.42 1084.02 1089.16 1091.70 1094.22 1096.72	5.2687 - 7 5.1130 4.9625 4.8170 4.5764 4.55405 4.8090 4.2819 4.1590 4.0400	1.5559 - 8 1.5099 1.4654 1.4225 1.3809 1.3408 1.3020 1.2044 1.2281 1.1930	5.1998 -10 5.0%61 4.8976 4.75%0 4.6153 4.4811 4.351% 4.2259 4.10%6 3.9872	7.135 -12 6.898 6.669 6.850 6.238 5.838 5.688 5.688 5.466 5.290	9.330 -1 9.020 8.721 8.434 8.437 7.890 7.635 7.386 7.147 6.918
850000 81670: 855000 82132: 860000 82593: 865000 83054: 870000 83515: 875000 84516: 885000 84896: 885000 85866: 895000 85866:	2474-67 2479-07 2483-43 2483-07 2492-07 2496-33 2500-56 2504-76	2010.56 2015.00 2019.40 2023.76 2028.10 2036.66 2040.35 2045.09 2049.26	1099.20 1101.66 1104.11 1106.54 11106.54 1111.33 1113.70 1116.05 1118.38 1120.70	3. 9250 - 7 3. 8136 3. 7059 3. 6016 3. 5007 3. 8030 3. 3084 3. 2168 3. 1281 2. 0421	1.1570 - 8 1.1262 1.0944 1.0636 1.0336 1.0358 1.0049 9.7697 - 9 9.4991 9.2371 8.9834	3.8736 -10 3.7638 3.6574 3.5545 3.4559 3.3585 3.2651 3.1747 3.0872 3.0072	5.121 -12 h.957 h.800 h.648 h.501 h.360 h.22h h.092 3.965 3.842	6.696 ~1 6.882 6.276 6.078 5.701 5.351 5.351 5.165

TABLE IV.—Continued
GEOMETRIC ALTHOUGE, ENGLISH UNITS

	<u> </u>	T			T. T. T.				
Altit	ude	1	emperatur	e		Pressure		Dec	nsity
Z, ft	H, ft	T, *R	t,°F	t,°C	P, mb	P, in Hg	P P.	ρ, lb ft ⁻³	<u>ρ</u> ρ ο
900000 905000 915000 915000 920000 935000 935000 945000 945000	862758 867352 871943 876533 881120 885705 890289 894870 899449 904025	2513.06 2517.16 2521.22 2525.25 2529.25 2537.15 2541.06 2544.92 2548.76	2053.39 2057.49 2061.55 2065.58 2069.58 2073.55 2077.48 2081.39 2085.25 2089.09	1122.99 1125.27 1127.53 1129.77 1131.99 1134.19 1136.38 1138.55 1140.70 1142.83	2.9589 - 7 2.8782 2.88001 2.7244 2.6510 2.5798 2.5109 2.4440 2.3792 2.3163	8.7376 - 9 8.4994 8.2687 8.0451 7.8284 7.6183 7.4147 7.2172 7.0258 6.8402	2.9202 -10 2.8406 2.7635 2.6887 2.6163 2.5461 2.4781 2.4781 2.3481 2.2861	3.72412 3.610 3.500 3.393 3.290 3.191 3.095 3.002 2.912 2.826	4.870 -11 4.720 4.576 4.437 4.302 4.172 4.047 3.925 3.808 3.695
950000 955000 960000 965000 975000 975000 980000 985000 995000	908600 913173 917743 922312 926878 931442 936004 940564 945122 949678	2552.57 2556.34 2560.08 2563.80 2567.48 2571.13 2574.75 2578.11 2580.17 2582.21	2092-90 2096-67 2100-41 2104-13 2107-81 2111-46 2115-08 2118-44 2120-50 2122-54	1144.94 1147.04 1149.12 1151.18 1153.23 1155.25 1157.26 1157.13 1160.28	2.2554 - 7 2.1962 2.1989 2.0832 2.0292 1.9768 1.9259 1.8766 1.8286 1.7820	6.6601 = 9. 6.4855 6.3161 6.1517 5.9922 5.8374 5.6872 5.5415 5.3999 5.2624	2.2259 -10. 2.1675. 2.1109 2.0560 2.0027 1.9509 1.9007 1.8520 1.8047 1.7587	2.742 -12 2.661 2.583 2.507 2.434 2.363 2.294 2.228 2.166 2.105	3.585 -11 3.480 3.377 3.278 3.182 3.090 3.000 2.914 2.832 2.752
1000000 1005000 1015000 1015000 1020000 1025000 1030000 1035000 1040000	954232 958784 963333 967881 972426 976970 981511 986050 990588 995123	2584.22 2586.21 2588.18 2590.12 2592.04 2593.94 2593.82 2597.67 2599.51 2601.32	2124.55 2126.54 2128.51 2130.45 2132.37 2134.27 2136.15 2138.00 2139.84 2141.65	1162.53 1163.63 1164.73 1165.81 1166.87 1167.93 1168.97 1170.00 1171.02	1.7368 - 7 1.6928 1.6501 1.6086 1.5691 1.5291 1.4910 1.4540 1.4180	5.1288 - 9 4.9990; 4.8728; 4.7503; 4.6312 4.5154; 4.4029 4.2936 4.1873 4.0839	1.7141 -10 1.6707 1.6286 1.5876 1.5478 1.5091 1.4715 1.4350 1.33994 1.3649	2.046 -12 1.988 1.9733 1.879 1.827 1.777 1.728 1.680 1.634 1.590	2.675 -11 2.600 2.528 2.457 2.389 2.323 2.259 2.197 2.137 2.079
1050000 1055000 1065000 1065000 1075000 1075000 1085000 1085000 1095000	999656 1004187 1008715 1013242 1017767 1022290 1026810 1031329 1035845 1040360	2603-11 2604-88 2606-63 2608-36 2610-07 2611-77 2613-44 2615-10 2616-73 2618-35	2143.44 2145.21 2146.96 2148.69 2150.40 2152.10 2153.77 2155.43 2157.06 2158.68	1173.02 1174.01 1174.98 1175.94 1176.89 1177.83 1178.76 1179.68 1180.59 1181.49	1.3489 - 7 1.3158 1.2836 1.2523 1.2229 1.1923 1.1635 1.1635 1.1082 1.0816	3.9834 - 9 3.8856 3.7906 3.6982 3.6083 3.5208 3.4357 3.3530 3.2724 3.1941	1.3313 -10 1.2986 1.2669 1.2360 1.2059 1.1767 1.1483 1.1206	1.547 -12 1.505 1.464 1.425 1.386 1.389 1.313 1.278 1.244 1.211	2.022 -11: 1.968 1.914 1.863 1.813 1.764 1.717 1.671 1.627
1100000 1105000 1110000 1115000 1125000 1125000 1135000 1145000	1044872 1049382 1053891 1058397 1062901 1067403 1071903 1076401 1080897 1085391	2619.95 2621.54 2623.11 2624.66 2626.19 2627.72 2629.22 2630.71 2632.19 2633.65	2160.28 2101.87 2163.44 2164.99 2166.52 2168.05 2169.55 2171.04 2172.52 2173.98	1182-38 1183-26 1184-13 1184-79 1185-85 1186-69 1187-53 1188-36 1189-18	1.0558 - 7 1.0307 1.0062 9.8242 - 8 9.5924 9.3668 9.1471 8.9333 8.7250	3.1178 - 9 3.0436 2.9714 2.9011 2.8326 2.7660 2.7012 2.6380 2.5765 2.5166	1.0420 -10 1.0172 9.9306 -11 9.6957 9.4957 9.2443 9.0275 8.8165 8.6109 8.4108	1.17912 1.146 1.118 1.089 1.060 1.033 1.006 9.80113 9.5548	1.542 -11 1.591 1.462 1.424 1.387 1.351 1.316 1.282 1.249
1150000 1155000 1165000 1165000 1175000 1175000 1185000 1185000 1195000	1089883 1094373 1098861 1103346 1107830 1112312 1116792 1121269 1125745 1130218	2635.10 2636.53 2637.95 2639.36 2640.76 2642.15 2643.52 2644.89 2646.24 2647.58	2175.43 2176.86 2178.28 2179.69 2181.09 2182.48 2183.85 2185.22 2186.57 2187.91	1190.79 1191.59 1192.38 1193.16 1193.74 1194.71 1195.47 1196.23 1196.98 1197.73	8.3247 - 8 8.1324 - 7.9450 7.9450 7.7625 7.5847 7.4115 7.2427 7.0783 6.9180 6.7619	2.4583 - 9 2.4015 2.34015 2.2923 2.2398 2.1886 2.1388 2.0429 1.9968	8.2159 -11 8.0260 7.8411 7.6610 7.4855 7.3146 7.1480 6.9857 6.8276	9.064 -13 8.633 8.633 8.389 8.176 7.970 7.769 7.574 7.384 7.199	1.185 -11 1.155 1.126 1.097 1.069 1.042 1.016 9.903 -12 9.655 9.414
1200000 1205000 1210000 1215000 1225000 1225000 1235000 1235000 1245000	1134690 1139159 1143627 1148092 1152556 1157017 1161476 1165934 1176389 1174842	2648.92 2650.24 2651.56 2652.87 2654.17 2655.46 2656.74 2658.02 2659.30 2660.56	2189.25 2190.57 2191.89 2193.20 2194.50 2195.79 2197.07 21,98.35 21,99.63 2200.89	1198.47 1199.21 1199.94 1200.66 1201.39 1202.11 1202.82 1203.53 1204.24 1204.94	6.6096 - 8 6.4613 6.3167 6.1757 6.0383 5.9043 5.7737 5.6463 5.5220 5.4009	1.9518 - 9 1.9080 1.8653 1.8237 1.7831 1.7435 1.7050 1.6673 1.6307 1.5949	6.5232 -11 6.3768 6.2341 6.0950 5.9593 5.8271 5.6982 5.5724 5.4498 5.3303	7.020 -13 6.846 6.676 6.511 6.351 6.195 6.043 5.895 5.752 5.612	9.180 -12 8.952 8.730 8.514 8.304 8.101 7.902 7.709 7.521 7,339
1250000 1255000 1260000 1265000 1270000 1270000 1280000 1280000 1290000	1179294 1183743 1188190 1192635 1197079 1201520 1205959 1210396 1214832 1219265	2661.82 2663.08 2664.33 2665.58 2666.83 2669.31 2670.54 2671.78 2673.01	2202.15 2203.41 2204.66 2205.91 2207.16 2208.40 2209.64 2210.87 2212.11 2213.34	1205.64 1206.34 -1207.04 1207.73 1208.42 1209.11 1209.00 1210.48 1211.17 1211.86	5.2527 - 8 5.1675 5.0551 4.9454 4.8384 4.7341 4.6322 4.5328 4.3528 4.3412	1.5600 - 9 1.5260 1.4928 1.4604 1.4288 1.3980 1.3679 1.3365 1.3099	5.2137 -11 5.0999 4.9890 4.8807 4.7752 4.6722 4.57716 4.3779 4.3779	5.476 -13 5.344 5.215 5.090 4.968 4.849 4.734 4.621 4.522	7.161 -12 6.988 6.820 6.656 5.496 6.341 6.190 6.043 5.900 5.760
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TABLE IV.—Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	udo.				LITTODE, E	:			
AIIII	uue		emperatur	e		Pressure		Den	sity
Z, ft	H, ft	T, °R	t,°F	t,°C	P, mb	P, in Hg	P P°	ρ, lb ft ⁻³	$\frac{\rho}{\rho_0}$
1300000 1305000 1315000 1315000 1325000 1325000 1330000 1345000 1345000	1223696 1228125 1232552 1236978 1241401 1245822 1250241 1254658 1259074 1263487	2674-24 2675-47 2676-70 2677-23 2677-15 2677-07 2676-99 2676-93 2676-87 2676-82	2214.57 2215.80 2217.03 2217.56 2217.48 2217.40 2217.32 2217.26 2217.20 2217.15	1212.54 1213.22 1213.91 1214.20 1214.11 1214.07 1214.03 1214.03 1214.00	4.2489 - 8 4.1587 4.0708 3.9849 3.9010 3.8190 3.7390 3.6608 3.5844 3.5098	1.2547 9 1.2281 1.2021 1.1767 1.1520 1.1278 1.1041 1.0810 1.0585	4.1933 -11 4.1044 4.0175 3.9328 3.8500 3.7691 3.6901 3.6129 3.5376 3.4639	4.301 -13 4.200 \$\infty\$102 4.007 3.915 3.826 3.739 3.654 3.572 3.491	5.625 -12 5.492 5.364 5.240 5.120 5.003 4.890 4.779 4.670 4.565
1350000 1355000 1360000 1360000 1375000 1375000 1385000 1385000 1395000	1267898 1272307 1276715 1281120 1285523 1289925 1294324 1298721 1303117 1307510	2676.77 2676.74 2676.69 2676.68 2676.69 2676.70 2676.70 2676.72 2676.75 2676.79	2217.10 2217.07 2217.04 2217.02 2217.01 2217.03 2217.05 2217.08 2217.08	1213.95 1213.95 1213.90 1213.90 1213.90 1213.90 1213.92 1213.92 1213.93 1213.96	3.4369 - 8 3.3657 3.2961 3.1616 3.0967 3.0332 2.9712 2.9106 2.8513	1.0149 - 9 9.9389 + 10 9.7334 9.5326 9.3363 9.1446 8.9572 8.7740 8.5550 8.4200	3.3920 -1.1 3.32-17 3.2530 3.1859 3.1859 3.0562 2.9936 2.9936 2.8725 2.8140	3.412 -13 3.336 3.261 3.136 3.116 3.047 2.979 2.913 2.848 2.786	4.462 4.362 4.264 4.168 4.075 3.984 3.896 3.896 3.809 3.725 3.642
1400000 1405000 1410000 1415000 1420000 1430000 1435000 1440000 1445000	1311902 1316291 1320679 1325064 1329448 133829 1338209 1342586 1346962 1351336	2676.85 2676.91 2676.99 2677.08 2677.19 2477.30 2677.43 2677.58 2677.73 2677.90	2217.18 2217.24 2217.32 2217.52 2217.52 2217.63 2217.76 2217.76 2217.91 2218.06 2218.23	1213.99 1214.02 1214.07 1214.72 1214.78 1214.78 1214.31 1214.39 1214.48 1214.57	2.7934 - 8 2.7368 2.6814 2.6273 2.5734 2.5227 2.4721 2.4227 2.3743 2.3270	8.2490 -10 8.0817 7.9183 7.7585 7.6023 7.4495 7.3002 7.1542 7.0114 6.8717	2.7569 -11 2.7016 2.646 2.5930 2.5408 2.4897 2.4897 2.43910 2.3433 2.2966	2.724 -13 2.664 2.606 2.549 2.493 2.438 2.385 2.334 2.283 2.234	3.562 -12 3.484 3.497 3.333 3.260 3.189 3.119 3.051 2.985 2.921
1450000 1455000 1465000 1465000 1475000 1475000 1485000 1485000 1495000	1355708 1360077 136445 1368811 1373175 1377537 1381897 1386255 1390511 1394965	2678.09 2678.29 2678.51 2678.74 2678.99 2679.25 2679.53 2679.53 2680.15 2680.48	2218.42 2218.62 2218.84 2219.07 2219.32 2219.58 2219.86 2220.16 2220.48 2220.81	1214.68 1214.79 1214.91 1215.04 1215.18 1215.32 1215.48 1215.65 1215.82 1216.00	2.2808 - 8 2.2356 2.1913 2.1481 2.1057 2.0643 2.0238 1.9842 1.9455 1.9075	6.7352 -10 6.6016 6.4710 6.3432 6.2182 6.0960 5.9764 5.6594 5.7449 5.6330	2.2510 -11 2.2063 2.1627 2.1200 2.0782 2.0373 1.9974 1.9583 1.9200 1.8826	2.185 -13 2.138 2.092 2.092 2.047 2.004 1.963 1.919 1.878 1.838 1.799	2.858 -12; 2.796 2.736; 2.677 2.620 2.564 2.509 2.456 2.404 2.353
1500000 1505000 1510000 1515000 1525000 1525000 1535000 1535000 1545000	1399317 1403668 1408016 1412362 1416707 1421049 1425390 1429728 1434065 1438400	2680.83 2681.19 2681.58 2681.98 2682.40 2683.30 2683.78 2684.27 2684.79	2221.16 2221.52 2221.91 2222.31 2222.73 2223.17 2223.63 2224.11 2224.60 2225.12	1216.20 1216.40 1216.61 1216.68 1217.07 1217.32 1217.57 1217.84 1218.11 1218.40	1.8704 - 8 1.8341 1.7986 1.7639 1.7298 1.6946 1.6640 1.6321 1.6009	5.5234 -10 5.4162 5.3113 5.2087 5.1082 5.0099 4.9137 4.8196 4.7274 4.6372	1.8460 -11 1.8102 1.7751 1.7751 1.7408 1.7072 1.6744 1.6422 1.6108 1.5800	1.761 -13 1.724 1.688 1.653 1.618 1.558 1.551 1.551 1.456	2.303 -12 2.255 2.207 2.161 2.116 2.071 2.028 1.986 1.985
1550000 1555000 1560000 1565000 1575000 1580000 1585000 1595000 1595000	1442733 1447063 1451392 1455719 1460044 1464367 146689 1473000 1477325 1481641	2685.32 2685.88 2686.45 2687.67 2688.30 2688.96 2689.64 2690.34 2691.06	2225.65 2226.21 2226.78 2227.38 2223.00 2228.63 2229.29 229.97 2230.67 2231.39	1218.70 1219.01 1219.32 1219.66 1220.00 1220.35 1220.72 1221.48 1221.88	1.5404 - 8 1.5112. 1.4825 1.4545 1.4270 1.4001 1.3738 1.3480 1.3228 1.2981	4.5889 -10 4.4625 4.3779 4.2951 4.2140 4.1386 4.0569 3.9608 3.9062 3.8333	1.5203 -1:1 1.4914 1.4915 1.4355 1.4084 1.3818 1.3558 1.3304 1.3305 1.2811	1.426 -13 1.397 1.368 1.340 1.312 1.285 1.259 1.234 1.206	1.865 -12 1.826 1.789 1.752 1.716 1.681 1.647 1.613 1.580 1.548
1600000 1605000 1610000 1615000 1625000 1630000 1635000 1640000 1645000	1485954 1490266 1494575 1498883 1503189 1507493 1511795 1516095 1520393 1524689	2691.80 2692.57 2693.35 2694.16 2694.99 2695.84 2696.71 2697.61 2698.52 2698.06	2232.13 2232.90 2233.65 2234.49 2235.32 2236.17 2237.04 2237.94 2238.85 2238.85	1222.30 1222.72 1223.16 1223.60 1224.07 1224.54 1225.02 1225.52 1226.03 1225.77	1.2739 - 8 1.2502 1.2270 1.2042 1.1820 1.1602 1.1388 1.1179 1.0974	3.7618 -10 3.6918 3.6233. 3.5561 3.4904 3.4240 3.3629 3.3629 3.2406 3.1813	1.2572 -11 1.2338 1.2109 1.1885 1.1665 1.1450 1.1239 1.1033 1.00830 1.0632	1.160 -13 1.136 1.113 1.091 1.009 1.008 1.027 1.006 9.861 -14	1.517 -12 1.456 1.456 1.457 1.398 1.370 1.342 1.316 1.289
1650000 1655000 1660000 1665000 1675000 1675000 1680000 1680000 1690000	1528983 1533276 1537566 1541855 1546142 1550426 1554709 1558990 1563269 1567546	2697.50 2696.96 2696.45 2695.51 2695.51 2695.08 2694.68 2694.68 2694.68 2693.62	2237.83 2237.29 2236.78 2236.30 2235.84 2235.41 2235.01 2234.63 2234.63 2234.27 2233.95	1225.46 1225.16 1224.88 1224.61 1224.36 1224.12 1223.89 1223.68 1223.49 1223.30	1.0576 - 8 1.0383 1.0194 1.0008 9.8266 - 9 9.6484 9.4736 9.3023 9.1343 8.9696	3.1231 -10 3.0661 3.0103 2.9555 2.9018 2.8492 2.7976 2.7470 2.6487	1.0438 -11 1.0247 1.0061 9.8775 -12 9.6981 9.5222 9.3497 9.1806 9.0148 8.8523	9.482 -14 9.299 9.120 8.945 8.773 8.605 8.446 8.278 8.120 7.965	1.240 -1c 1.216 1.193 1.170 1.147 1.125 1.104 1.083 1.062 1.042
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TABLE IX.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

° Altit	ude	T	emperatur	e	,	Pressure		Den	sity
Z, ft	H, ft	Τ, °R	t,°F	t, °C	P, mb	P, in Hg	<u>Р</u>	ρ, lb ft ⁻³	<u>ρ</u> ρ _o
1700000 1705000 1715000 1715000 1725000 1725000 1735000 1735000 1745000	1571822 1576095 1580367 1584636 1588904 1593170 1597434 1601696 1605956 1610214	2693.32 2693.04 2693.79 2692.57 2692.37 2692.20 2392.05 2691.93 2691.83 2691.76	2233.65 2233.37 2233.12 2232.90 2232.70 2232.53 2232.38 2232.26 2232.16 2232.09	1223.14 1222.98 1222.85 1222.61 1222.61 1222.52 1222.43 1222.37 1222.31 1222.27	8.8081 - 9 8.6497 8.4944 8.3422 8.1929 8.0464 7.9029 7.7620 7.6239 7.4885	2.6010 -10 2.5543 2.5084 2.4634 2.4194 2.3761 2.3337 2.2921 2.2513 2.2113	8.6929 -12 8.5366 8.3834 8.2331 8.0857 7.9412 7.7995 7.6605 7.5242 7.3996	7.814 -14 7.665 7.520 7.377 7.237 7.101 6.967 6.835 6.707 6.581	1.002 -12 1.002 9.833 -13 9.647 9.285 9.110 8.938 8.770 8.605
1750000 1755000 1760000 1765000 1776000 1775000 1785000 1785000 1790000	1614470 1618725 1622977 1627228 1631477 1635724 1639969 1644212 1648453 1652693	2691-71 2691-69 2691-70 2691-78 2691-85 2691-85 2692-08 2692-22 2692-39	2232.04 2232.02 2232.03 2232.05 3232.11 2232.18 2232.28 2232.41 2232.55 2232.72	1222.25 1222.23 1222.24 1222.25 1222.28 1222.32 1222.38 1222.45 1222.53 1222.53	7.3556: - 9, 7.2253 7.0975. 6.9722 6.8492 6.6103 6.4942 6.3804 6.2687	2-1-72-1 -10 2-1-336 2-0-959 2-0-959 2-0-959 2-0-987-0 1-9-95-0 1-9-1-77 1-8-84-1 1-8-5-11	7.2594: -12 7.1309 7.0047 6.8810 6.7596 6.6406 6.5238 6.4093 6.2969 6.1867	6.457 -14 6.336 6.218 6.101 5.987 5.876 5.767 5.659 5.554	8.443 -13 8.205 8.130 7.978 7.929 7.929 7.564 7.541 7.400 7.223 7.129
1800000 1805000 1810000 1815000 1825000 1825000 1830000 1830000 1840000 1845000	1656931 1661166 1665400 1669632 1673862 1678890 1682317 1686541 1690764 1694985	2692.59 2692.81 2693.05 2693.31 2693.60 2693.90 2694.23 2694.59 2694.96	2232.92 2233.14 2233.58 2233.64 2233.93 2234.23 2234.56 2234.92 2235.29 2235.68	1222.73 1222.85 1222.99 1223.13 1223.29 1223.46 1223.65 1223.84 1224.05 1224.27	6.1591 - 9 6.0516 5.9461 5.9461 5.8426 5.7411 5.6414 5.5437 5.4377 5.4377 5.3536	1.8188 -10 1.77870 1.7559 1.7253 1.6953 1.6659 1.6370 1.6087 1.5809	6.0785 -12 5.9724 5.8683 5.7662 5.6660 5.5677 5.4712 5.3765 5.2836 5.1924	5.351 -14 5.252 5.155 5.060 4.967 4.876 4.699 4.613 4.529	6.997 -13 6.868 6.741 6.617 6.495 6.376 6.259 6.144 6.032 5.922
1850000 1855000 1840000 1845000 1875000 1885000 1885000 1895000 1895000	1899203 1703421 1707636 1711849 1716061 1720270 1724478 1728684 1732888 1737090	2095.77 2696.21 2696.66 2697.14 2697.64 2698.15 2698.69 2699.25 2699.82 2700.41	2236.10 2236.54 2236.99 2237.47 2237.97 2238.48 2239.02 2239.58 2240.15	1224.50 1224.74 1225.00 1225.26 1225.26 1225.54 1225.82 1226.12 1226.43 1226.75 1227.08	5-1706 - 9 5-0816 4-9944 4-9087 4-8246 4-7421 4-6611 4-5816 4-5036 4-4270	1.5269 -10 1.5006 1.5748 1.4495 1.4297 1.4003 1.3764 1.3530 1.3299 1.3073	5.1030 -12 5.0152 4.9291 4.8445 4.7615 4.6801 4.6002 4.5217 4.4447 4.3691	4.446 -14 4.365 4.286 4.208 4.132 4.057 3.983 3.911 3.841 3.772	5.814 -13 5.778 5.604 5.502 5.403 5.305 5.209 5.115 5.023 4.932
190000 1905000 1910000 1915000 1925000 1925000 1930000 1935000 1945000	1741290 1745489 1749486 1753880 1758073 1762265 1766454 1770441 1774827 1779011	2701.02 2701.65 2702.30 2702.96 2703.64 2703.65 2705.05 2705.78 2706.52 2707.28	2241.35 2241.96 2242.63 2243.29 2243.27 2244.66 2245.38 2246.11 2246.85 2247.61	1227-42 1227-77 1228-13 1228-49 1228-87 1229-26 1229-65 1230-06 1230-47 1230-69	4.3518 - 9 4.2780 4.2056 4.1345 4.0647 3.9962 3.9289 3.8629 3.7344	1.2851 -10 1.2635 1.2419 1.2209 1.2009 1.1801 1.1602 1.1407 1.1216 1.1028	4.2949 -12 4.2221 4.1506 4.0804 4.0816 3.9439 3.8775 3.8123 3.7483 3.6855	3.704 -14 3.638 3.572 3.508 3.446 3.384 3.324 3.265 3.207 3.150	4.843 -13 4.757 4.671 4.558 4.506 4.425 4.346 4.269 4.193 4.119
1950000 1955000 1960000 1965000 1975000 1975000 1980000 1980000 1990000	1783193 1787373 1791551 1795728 1799902 1804075 1808246 1812415 1816582 1820748	2708.05 2708.84 2709.54 2710.46 2711.00 2710.68 2710.69 2710.69 2710.56	2248.38 2249.17 2247.97 2250.79 2251.33 2251.21 2251.11 2251.02 2250.95 2250.89	1231.32 1231.76 1232.21 1232.66 1232.96 1252.90 1232.84 1232.79 1232.75 1232.75	3.6718 - 9 3.6105 3.5502 3.4910 3.4329 3.3759 3.3759 3.2047 3.2106 3.1575	1.084510 1.0462 1.0484 1.0309 1.0137 9.968911 9.8034 9.6408 9.4810 9.3241	3.6238 -12 3.5633 3.5038 3.3454 3.3880 3.3317 3.2764 3.2220 3.1687 3.1162	3.094 -14 3.039 2.985 2.933 2.881 2.882 2.783 2.785 2.688 2.642	h.046 -13 3.974 3.904 3.835 3.768 3.703 3.639 3.576 3.576 3.575
2000000 2010000 2020000 2030000 2040000 2050000 2060000 2070000 2080000 2090000	1824911 1833233 1841548 1849855 1858155 1866448 1874733 1883011 1891282 1899546	2710-51 2710-44 2710-42 2710-49 2710-58 2710-70 2710-84 2711-01 2711-20	2250.84 2250.77 2250.75 2250.77 2250.82 2250.91 2251.03 2251.17 2251.34 2251.53	1232.69 1232.65 1232.68 1232.68 1232.68 1232.73 1232.79 1232.87 1232.97 1233.07	3.1053 - 9 3.0036 2.9055 2.8107 2.7193 2.6310 2.5458 2.4635 2.3840 2.3072	9.1699 -31 8.8697 8.5799 8.3001 8.0301 7.7694 7.5176 7.2746 7.0399 6.8133	3.0647 -12 2.9643 2.8675 2.7740 2.6837 2.5966 2.5125 2.4312 2.3528 2.2771	2.596 -14 2.508 2.423 2.341 2.262 2.116 2.112 2.041 1.973	3.395 -13 3.280 3.168 3.061 2.958 2.858 2.762 2.669 2.569 2.494
2100000 2110000 2120000 2130000 2140000 2150000 2160000 2170000 2180000 2190000	1907803 1914052 1924294 1932529 1940757 1948978 1957192 1965398 1973597 1981789	2711.40 2711.61 2711.83 2712.06 2712.29 2712.52 2712.74 2713.16 2713.35	2251.73 2251.94 2252.37 2252.62 2252.62 2252.87 2253.07 2253.29 2253.49 2253.68	1233.18 1233.30 1233.42 1233.55 1233.68 1233.80 1233.93 1234.05 1234.16 1234.27	2.2331 - 9 2.1615 2.0924 2.0256 1.9611 1.8987 1.8385 1.7803 1.7241 1.6697	6.5944 -11 6.3830 6.1788 5.9816 5.7910 5.6069 5.4291 5.2572 5.0911 4.9307	2.2039 -12 2.1333 2.0650 1.9991 1.9354 1.8739 1.8145 1.7570 1.7015	1.843 -14 1.782 1.723 1.666 1.611 1.557 1.506 1.457 1.409 1.363	2.416 -13 2.330 2.253 2.178 2.106 2.036 1.969 1.905 1.842 1.782

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TABLE IV.—Concluded
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	uđe	T	emperatur	е		Pressure		Den	sity [,]
Z, ft	H, ft	T,°R	t,°F	t,°C	P, mb	P, in Hg	P P°	ρ, lb ft ⁻³	$\frac{\rho}{\rho_{o}}$
2200000 2210000 2220000 2230000 2240000 2250000 2270000 2270000 2280000 2290000	1989974 1998152 2006323 2014487 2022643 2030793 2038936 2047071 2055199 2063321	2713.52 2713.67 2713.80 2713.97 2713.97 2714.01 2714.02 2713.99 2713.92 2713.80	2253.85 2254.00 2254.13 2254.23 2254.30 2254.34 2254.35 2254.35 2254.32 2254.35	1234.36 1234.45 1234.52 1234.57 1234.61 1234.63 1234.64 1234.62 1234.58 1234.58	1.6172 - 9 1.5664 1.5174 1.4699 1.4241 1.3797 1.3369 1.2954 1.2554 1.2166	4.7756 ~11 4.6257 4.4808 4.3407 4.2052 4.0744 3.9478 3.6254 3.7071 3.5926	1.5960 -12 1.5459 1.4975 1.4507 1.4054 1.36.17 1.3194 1.2785 1.2389	1.318 -14 1.275 1.234 1.194 1.155 1.118 1.081 1.047 1.013 9.805 -15	1.724 -15 1.667 1.613 1.550 1.510 1.461 1.414 1.369 1.325 1.282
2300600 2310000 2320000	2071435 2079543 2087643	2713.65 2713.44 2713.20	2253.98 2253.77 2253.53	1234.43 1234.32 1234.18	1.1791 - 9 1.1429 1.1078	3.4619 -11 3.3749 3.2713	1.1637 -12 1.1279 1.0933	9.49115: 9.188 8.895	1.241 -13 1.201 1.163
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Table V

ACCELERATION DUE TO GRAVITY, SPECIFIC WEIGHT, PRESSURE SCALE HEIGHT, NUMBER DENSITY, PARTICLE SPEED, COLLISION FREQUENCY, MEAN FREE PATH, AND MOLECULAR WEIGHT

English Units

Note: A one- or two-digit number (preceded by a plus or minus sign) following the initial entry of each block indicates the power of ten by which that entry and each succeeding entry of that block should be multiplied. A change of power occurring within a block is indicated by a similar notation.

TABLE Y GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude	Accel. due to	Specific	Pressure scale	Number	Particle	Collision	Mean free	
H, fi	Z, ft		weight ω, lb ft ⁻² sec ⁻²	height H _P , ft	density n, ft ⁻⁸	speed ∇, ft sec ⁻¹	frequency ν , sec i	path L _i ft y	weight M
-16500 -16400 -16300 -16200 -16100	-16487 -16387 -16287 -16187 -16088	32.225 32.225 32.224 32.224 32.224	3.8934 + 0 3.8831 3.8729 3.8627 3.8525	30763. 30744. 30726. 30707. 30688.	1.1395 +24 1.1365 1.1365 1.1306 1.1276	1588.8 1588.3 1587.9 1587.4 1586.9	1-1535 +10 1-1501 1-1467 1-1434 1-1400	1.37.74 - 7 1.3810 1.3847 1.3883 1.3920	28.964 28.964 28.964 28.964 28.964
-14000 -15900 -15800 -15700 -15600 -15500 -15300 -15200 -15100	-15988 -1588 -15788 -15688 -15488 -15488 -15389 -15289 -15189 -15089	32.223 32.223 32.223 32.223 32.222 32.222 32.222 32.221 32.221	3.8423 + 0 3.8322 3.8220 3.8119 3.8018 3.7917 3.7716 3.77616 3.7616	30669. 30651. 30632. 30613. 30595. 30557. 30557. 30538. 30530.	1.1246 +24 1.1217 1.1187 1.1157 1.1128 1.1099 1.1040 1.1011 1.0982	1586.4 1585.4 1585.4 1584.9 1583.9 1583.4 1582.9 1582.4 1582.0	1.1367 +10 1.1333 1.1300 1.1267 1.1233 F.1200 1.167 1.1134 1.1134	1.3956 - 7 1.3993 1.4030 1.4067 1.4105 1.4142 1.4177 1.4255 1.4293	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-15000 -14900 -14800 -14700 -14600 -14500 -14400 -14300 -14200	-14989 -14889 -14790 -14690 -14590 -14490 -14390 -14190 -14090	32.220 32.220 32.219 32.219 32.219 32.218 32.218 32.218 32.218	3.7417 + 0 3.7317 3.7218 3.7119 3.7129 3.7020 3.6921 3.6823 3.6724 3.6626 3.6528	30482. 30445. 30445. 30426. 30428. 30389. 30370. 30333. 30314.	1.0953 +24 10.0924 1.0895 1.0866 1.0837 1.0808 1.0779 1.0751 1.0752	1581.5 1581.0 1580.5 1580.5 1579.5 1579.0 1578.5 1578.0 1577.5	1.1036 +10 1.1003 1.0970 1.0938 1.0905 1.0873 1.0841 1.0809 1.0776	1.330 - 7 1.4369 1.4465 1.4464 1.4522 1.4561 1.4600 1.4639 1.4678	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-14000 -13900 -13800 -13700 -13600 -13500 -13400 -13200 -13100	-13991 -13891 -13791 -13691 -13591 -13491 -13391 -13292 -13192 -13092	32.217 32.217 32.217 32.216 32.216 32.216 32.215 32.215 32.215 32.215	3.6431 + 0 3.6333 3.6236 3.6139 3.6139 3.6042 3.5945 3.5849 3.5753 3.5656 3.5561	30295. 30277. 30258. 30239. 30220. 30104. 30146. 30146.	1.0665 +24 1.0637 1.0608 1.0580 1.0552 1.0523 1.0495 1.0467 1.0439	1576.5 1576.0 1575.5 1575.0 1574.5 1574.1 1573.6 1573.1 1572.6 1572.1	1.0712 +10 1.0680 1.0647 1.0617 1.0585 1.0554 1.0522 1.0491 1.0459 1.0428	1.4717 - 7 1.4756 1.4756 1.4875 1.4875 1.4915 1.4955 1.4995 1.5035	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-13000 -12900 -12800 -12700 -12600 -12500 -12400 -12300 -12200 -12100	-12992 -12892 -12792 -12692 -12592 -12493 -12293 -12293 -12193 -12093	32.214 32.214 32.213 32.213 32.213 32.213 32.212 32.212 32.212 32.212	3.5465 + 0 3.5369 3.5274 3.5179 3.5084 3.4989 3.4895 3.4895 3.48706 3.4612	30108- 30089- 30071- 30052- 30033- 30015- 29996- 29977- 29958- 29940-	1.0383 +24 1.0355 1.0328 1.0300 1.0272 1.0245 1.0217 1.0189 1.0162	1571.6 1571.1 1570.6 1570.1 1569.6 1569.1 1568.6 1568.1 1567.6 1567.1	1.0397 +10 1.0365 1.0334 1.0303 1.0272 1.0241 1.0211 1.0180 1.0149	1.5116 - 7 1.5157 1.5198 1.5239 1.5230 1.5321 1.5362 1.5362 1.5404 1.5445	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-12000 -11900 -11600 -11700 -11600 -11500 -11400 -11300 -11200 -11100	-11993 -11893 -11793 -11693 -11594 -11494 -11394 -11294 -11194 -11194	32.211 32.211 32.210 32.210 32.210 32.210 32.209 32.209 32.209 32.209	3.4519 + 0 3.4425 3.4332 3.4239 3.4146 3.4053 3.3960 3.3868 3.3776 3.3684	29921- 29902- 29884- 29865- 29846- 29827- 29809- 29770- 29771- 29753-	1.0107 +24 1.0080 1.0053 1.0026 9.9984 +23 9.9713 9.9443 9.9173 9.8904 9.8636	1566.0 1566.1 1565.6 1565.1 1564.6 1564.1 1563.6 1563.1 1562.6 1562.1	1.0088 +10 1.0058 1.0027 9.9971 + 9 9.9669 9.9367 9.9066 9.8766 9.8867 9.8168	1.5529 - 7 1.5571 1.5613 1.5656 1.5698 1.5741 1.5784 1.5826 1.5870 1.5913	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-11000 -10900 -10800 -10700 -10600 -10500 -10400 -10300 -10200 -10100	-10994 -10894 -10794 -10695 -10595 -10495 -10395 -10295 -10195 -10095	32.208 32.208 32.207 32.207 32.207 32.206 32.206 32.206 32.206 32.206	3.3592 + 0 3.3500 3.3409 3.3318 3.3227 3.3136 3.3045 3.2955 3.2864 3.2774	29734. 29715. 29696. 29659. 29659. 29640. 29621. 29603. 29584. 29565.	9.8368 +23 9.8101 9.7834 9.7568 9.7302 9.7037 9.6772 9.6509 9.6245 9.5982	1561.6 1561.1 1560.6 1560.1 1559.6 1559.1 1558.6 1558.1 1557.6	9.7871 + 9 9.7573 9.7577 9.6981 9.6686 9.6392 9.5098 9.5805 9.5513 9.5222	1.5956 - 7 1.6000 1.6043 1.6087 1.6131 1.6175 1.6219 1.6263 1.6308	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-10000 -9900 -9800 -9700 -9500 -9500 -9400 -9300 -9100	-9995 -9895 -9795 -9695 -9596 -9496 -9396 -9296 -9196 -9096	32.205 32.205 32.204 32.204 32.204 32.203 32.203 32.203 32.203 32.202	3.2684 + 0 3.2595 3.2595 3.2416 3.2327 3.2238 3.2149 3.2060 3.1972 3.1884	29547. 29528. 29509. 29490. 29472. 29453. 29434. 29415. 29397. 29378.	9.5720 +23 9.5458 9.5197 9.4936 9.4676 9.4416 9.4157 9.3899 9.3641 9.3383	1556.6 1556.1 1555.6 1555.1 1554.6 1554.1 1553.6 1553.1 1552.6	9.4931 + 9 9.4641 9.4351 9.4063 9.3775 9.3887 9.3201 9.2915 9.2630 9.2345	1.6397 - 7 1.6442 1.6488 1.6533 1.6578 1.6624 1.6670 1.6716 1.6762 1.6808	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
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GEOMETRIC ALTITUDE, ENGLISH UNITS

Altif	ude	Accel.	Specific weight	Pressure scale	Number density	Particle speed	Collision frequency	Mean free	Molecular weight
Z, ft	∘H, ft	gravity g, ft sec ⁻²	ω, lb ft ⁻² sec ⁻²	height H _e , ft		V, ft sec⁻¹		L, ft	M
-16500 -16400 -16300 -16200 -16100	-16513 -16413 -16313 -16213 -16112	32.225 32.225 32.224 32.224 32.224	3.8947 + 0 3.8845 3.8742 3.8640 3.8538	30765. 30747. 30728. 30709.	1.1399 +24 1.1369 1.1339 1.1309 1.1280	1588-9 1588-4 1587-9 1587-4 1586-9	1.1539 +10 1.1506 1.1472 1.1438 1.1464	1.3769 - 7 1.3806 1.3842 1.3879 1.3915	25.964 28.964 28.964 20.964 28.964
-16000 -15900 -15800 -15700 -15600 -15500 -15300 -15300 -15100	-16012 -15912 -15812 -15712 -15612 -15512 -15411 -15311 -15111	32.223 32.223 32.223 32.223 32.222 32.222 32.222 32.221 32.221 32.221	3.8436 + 0. 3.8334 3.8232 3.8131 3.8030 3.7929 3.7828 3.7728 3.7527	30672. 30653. 30654. 30615. 305597. 30559. 30554. 30542. 30503.	1.7250 +24 1.7220 1.1190 1.1161 1.1131 1.1102 1.1073 1.1014 1.0985	1586.4 1586.0 1585.5 1585.0 1584.5 1584.0 1583.0 1582.5 1582.0	1.1371 +10 1.1337 1.1304 1.1270 1.1237 1.1204 1.1171 1.1178 1.1105 1.1072	1.3952 ~ 7 1.3989 1.4026 1.4063 1.4100 1.4138 1.4175 1.4251 1.4288	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-15000 -14900 -14860 -14600 -14600 -14500 -14500 -14300 -14200 -14100	- 15011 -14911 -14811: -14710 -14610 -14510 -14410 -14310 -14210 -14110	32.220 32.220 32.220 32.219 32.219 32.219 32.219 32.218 32.218 32.218	3.7428 + 0 3.7328 3.7328 3.7129 3.7030 3.6031 3.6033 3.6734 3.6636	30484. 30466. 30447. 30428. 30409. 30391. 30372. 30334. 30316.	1.0956 +24 1.0927 1.0898 1.0869 1.0840 1.0811 1.0782 1.0754 1.0755	1581.5 1581.0 1580.5 1580.0 1579.5 1579.0 1578.6 1578.1 1577.6	1.1039 +10 1.1006 1.0974 1.0991 1.0909 1.0876 1.0812 1.0747	7.4326 - 7 1.4364 1.4403 1.4480 1.45518 1.4557 1.4635 1.4635	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-14000 -13900 -13800 -13700 -13600 -13500 -13500 -13200 -13200	-14009 -13909 -13609 -13709 -13609 -13509 -13409 -13308 -13208	32.217 32.217 32.217 32.216 32.216 32.216 32.215 32.215 32.215 32.215	3.6440 + 0 3.6342 3.6245 3.60148 3.6051 3.5954 3.5857 3.5761 3.5664 3.5568	30297. 30278. 30260. 30291. 30222. 30203. 30185. 30166. 30147.	1-0668 +24 1-0639 1-0611 1-0582 1-0554 1-0526 1-0470 1-0470 1-0442	1576.6 1575.1 1575.6 1575.1 1574.6 1574.1 1573.6 1573.1 1572.6 1572.1	1.0715 +10 1.0683 1.0652 1.0620 1.0588 1.0556 1.0525 1.0493 1.0462 1.0430	1.47/13 - 7 1.4753 1.4753 1.4792 1.4872 1.4911 1.4952 1.4992 1.5032 1.5072	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-13900 -12900 -12800 -12700 -12600 -12500 -12500 -12200 -12100	-13008 -12908 -12808 -12708 -12608 -12507 -12407 -12207 -12207 -12107	32.214 32.214 32.213 32.213 32.213 32.212 32.212 32.212 32.212 32.212	3.5473 + 0 3.5377 3.5282 3.5186 3.5091 3.4996 3.4992 3.4807 3.4713 3.4619	30110. 30091. 30072. 30053. 30035. 30016. 29997. 29940. 29941.	1.0386 +24 1.0358 1.0330 1.0302 1.0274 1.0247 1.0219 1.0191 1.0164 1.0136	1571.6 1571.1 1570.6 1570.1 1569.6 1569.1 1568.6 1568.1 1567.6	1.0399 +10 1.0368 1.0337 1.0306 1.0275 1.0244 1.0213 1.0182 1.0151	1.5113 - 7 1.5154 1.5195 1.5236 1.5227 1.5318 1.5359 1.5401 1.5443 1.5884	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-12000 -11900 -11800 -11700 -11500 -11500 -11300 -11200 -11100	-12007 -11907 -11807 -11707 -11706 -11506 -11406 -11306 -11206 -11106	32.211 32.210 32.210 32.210 32.210 32.210 32.209 32.209 32.209 32.209 32.209	3.4525 + 0 3.4431 3.4338 3.4245 3.4152 3.4059 3.3966 3.3874 3.3781 3.3689	29922. 29904. 29885. 29866. 29847. 29829. 29810. 29791. 29772. 29754.	1.0109 +2% 1.0082 1.0055 1.0027 1.0000 9.9730 +23 9.9460 9.97190 9.8921 9.8652	1566.6 1566.1 1565.6 1565.1 1564.6 1564.2 1563.7 1563.2 1562.7	1.0090 +10 1.0060 1.0029 9.9991 + 9 9.9386 9.9386 9.4085 9.8785 9.8485 9.8186	1.5526 - 7 1.5568 1.5611 1.5653 1.5695 1.5738 1.5781 1.5824 1.5824 1.5910	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-11000 -10900 -10800 -10700 -10600 -10500 -10300 -10200 -10100	-11006 -10906 -10806 -10705 -10505 -10505 -10305 -10205 -10105	32.208 32.208 32.207 32.207 32.207 32.206 32.206 32.206 32.206 32.206	3.3597 + 0 3.3506 3.3414 3.3323 3.3232 3.3141 3.3050 3.2959 3.2869 5.2779	29735. 29716. 29697. 29679. 29660. 29641. 29622. 29604. 29585. 29566.	9.8384 +23 9.8116 9.7849 9.7582 9.7316 9.7051 9.6786 9.6522 9.6258 9.5995	1561.7 1561.2 1560.7 1560.2 1559.7 1559.2 1558.7 1558.2 1557.7	9.7888 + 9 9.7590 9.7293 9.6997 9.6702 9.6407 9.6113 9.5620 9.5520 9.5526	1.5954 - 7 1.5997 1.6041 1.6085 1.6128 1.6173 1.6217 1.6261 1.6350	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-10000 -9900 -9800 -9700 -9600 -9500 -9400 -9300 -9100	-10005 -9905 -9805 -9705 -9704 -9504 -9504 -9304 -9204 -9104	32.205 32.205 32.204 32.204 32.203 32.203 32.203 32.203 32.203	3.2689 + 0 3.2599 3.2599 3.2420 3.2331 3.2242 3.2153 3.2064 3.1976 3.1687	29547. 29529. 29510. 29491. 29472. 29454. 29436. 2946. 29398.	9.5732 +23. 9.5470 9.5209 9.4948 9.4687 9.4168 9.4168 9.3700 9.3651 9.3394	1556.7 1556.1 1555.6 1555.1 1554.6 1554.1 1553.6 1553.1 1552.6	9.4945 ÷ 9: 9.4365 9.4365 9.3787 9.3700 9.3213- 9.227 9.2641 9.2356	1.6395 - 7 1.6440 1.6486 1.6531 1.6576 1.6622 1.6668 1.6714 1.6760	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
,			e Section						

TABLE W.-Continued
GEOPÓTENTIAL ALTITUDE, ENGLISH UNITS

Alti	ude	Accel. due to	Specific weight	Pressure scale height		Particle speed	Collision frequency	Mean free path	Moleculo weight
H, ft	Ż, ft	gravity g, ft sec ⁻²	weight ω, lb ft ⁻² sec ⁻²	H _p , ft	: n, ft ^{-\$}	V, ft/sec⁻¹		L, ff	M
-9000 -8900 -8800 -8700 -8600:	-8996 -8896 -8796 -8696 -8596 -8497	32.202 32.202 32.201 32.201 32.201 32.200	3-1796 + 0 3-1708 3-1620 3-1533 3-1446 3-1359	29359. 29341. 29322. 29303. 29284. 29266.	9.3126 +23 9.2870 9.2614 9.2359 9.2104 9.1850	1551.6 1551.1 1550.6 1550.1 1549.6	9.2061 + 9 9.1778 9.1496 9.1214 9.0933 9.0652 9.0373	1.6854 - 7 1.6901 1.6947 1.6994 1.7041 1.7088	28.964 28.964 28.964 28.964 28.964
-8400 -8300 -8200 -8100	-8397 -8297 -8197 -8097	32.200 32.200 32.199 32.199	3.1272 3.1185 3.1098 3.1012	29247. 29228. 29209. 29191.	9.1596 9.1343 9.1091 9.0839	1548.6 1548.1 1547.6 1547.1	9.0373 9.0094 8.9815 8.9538	1.7136 1.7183 1.7231 1.7279	28.964 28.964 28.964 28.964
-8000 -7900 -7800 -7700 -7600 -7500 -7400 -7300 -7200 -7100	-7997 -7897 -7797 -7697 -7597 -7497 -7397 -7297 -7198 -7098	32.199 32.198 32.198 32.198 32.197 32.197 32.197 32.197 32.196	3.0926 + 0 3.0840 3.0754 3.0668 3.0583 3.0498 3.0413 3.0328 3.0243 3.0159	29172. 29153- 29135. 29116. 29097. 29078. 29060. 29041. 29022. 29003.	9.0587 +23 9.0336 9.0066 8.9836 8.9586 8.9586 8.9537 8.9089 8.8841 8.8594 8.8347	1546.6 1546.1 1545.6 1545.1 1544.6 1544.1 1543.0 1542.5 1542.0	8.9261 + 9 8.8984 8.8709 8.8434 8.8159 8.7886 8.7613 8.7340 8.7069 8.6798	1.7327 - 7 1.7375 1.7423 1.7422 1.7520 1.7569 1.7668 1.7667 1.7716	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.966
-7000 -6900 -6800 -6700 -6500 -6400 -6300 -6200 -6100	-6998 -6898 -6798 -6598 -6598 -6498 -6298 -6198 -6098	32.195 32.195 32.195 32.195 32.194 32.194 32.194 32.193 32.193 32.193	3.0074 + 0 2.9990 2.9906 2.9822 2.9739 2.9655 2.9572 2.9489 2.9489 2.9406 2.9323	28985. 28966. 28947. 28928. 28910. 28871. 28872. 28833. 28835. 28816.	8.8101 +23 8.7855 8.7610 8.7366 8.7121 8.6878 8.6635 8.6392 8.6150 8.5909	1541.5 1540.5 1540.0 1540.0 1539.5 1539.0 1538.5 1537.0	8.6528 + 9 8.6258 8.5989 8.5721 8.5186 8.4920 8.4654 8.4389 8.4125	1.7816 - 7 1.7815 - 7 1.7915 1.7955 1.8016 1.8066 1.8117 1.8168 1.8219	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-6000 -5900 -5800 -5700 -5600 -5500 -5400 -5300 -5100	-5998 -5898 -5798 -5698 -5598 -5399 -5399 -5299 -5199 -5099	32.193 32.192 32.192 32.192 32.191 32.191 32.191 32.190 32.190 32.190	2.9241 + 0. 2.9158 2.9076 2.8994 2.8912 2.8831 2.8749 2.8668 2.8587 2.8506	28797. 28779. 28760. 28741. 28722. 28704. 28685. 286647. 28629.	8.5668 +23 8.5427 8.5187 8.4948 8.4709 8.4470 8.4232 8.3995 8.3758 8.3758	1536.5 1536.0 1535.5 1534.9 1534.4 1533.9 1533.4 1532.9 1532.4 1531.9	8.3861 + 9 8.3598 8.3336 8.3074 8.2813 8.2553 8.2293 8.2293 8.1775 8.1517	1.8322 - 7 1.8373 1.8425 1.8477 1.8529 1.8581 1.8584 1.8686 1.8739 1.87792	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-5000 -4900 -4800 -4700 -4600 -4500 -4500 -4300 -4200 -4100	- 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000	32.189 32.189 32.189 32.189 32.188 32.188 32.188 32.187 32.187	2.8425 + 0 2.8345 2.8264 2.8184 2.8024 2.7944 2.7785 2.7785 2.7706	28610. 28591. 28572. 28554. 28535. 28516. 28497. 284470. 28441.	8.3286 +23 8.3051 8.2816 8.2581 8.2348 8.2114 8.1081 8.1649 8.1417 8.1186	1531.4 1530.9 1530.4 1529.9 1529.3 1528.8 1528.3 1527.8 1527.8	8.1260 + 9 8.1003 8.0748 8.0492 8.0238 7.9984 7.9730 7.9477 7.9225 7.8974	1.88% - 7 1.8895 1.8895 1.9006 1.9000 1.911% 1.9169 1.9223 1.9278	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-4000 -3900 -3800 -3700 -3600 -3500 -3400 -3200 -3100	-3999 -3899 -3799 -3699 -3599 -3499 -3399 -3299 -3200 -3100	32.186 32.186 32.186 32.185 32.185 32.185 32.185 32.184 32.184	2.7627 + 0 2.7548 2.7469 2.7391 2.7313 2.7234 2.7156 2.7079 2.7001 2.6924	28422. 28404. 28385. 28386. 28347. 28329. 28310. 28291. 28291. 28254.	8.0955 +23 8.0725 8.0495 8.0266 8.0037 7.9809 7.9581 7.9354 7.9127 7.8900	1526.3 1525.8 1525.3 1524.8 1524.2 1523.7 1523.2 1522.7 1522.7	7.8723 + 9 7.8473 7.8223 7.7974 7.7726 7.7478 7.7231 7.6985 7.6739 7.6494	1.9388 - 7 1.9443 1.9499 1.9555 1.9610 1.9667 1.9723 1.9779 1.9836 1.9893	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-3000 -2900 -2800 -2700 -2600 -2500 -2400 -2300 -2200 -2100	-3000 -2900 -2800 -2700 -2600 -2500 -2400 -2300 -2200 -2100	32.183 32.183 32.183 32.182 32.182 32.182 32.181 32.181 32.181 32.181	2.6846 + 0 2.6769 2.6692 2.6615 2.6539 2.6462 2.6310 2.6310 2.6234 2.6158	28235. 28216. 28197. 28179. 28160. 28141. 28122. 28104. 28085. 28066.	7.8675 +23 7.8449 7.8225 7.8000 7.7776 7.7553 7.7330 7.7108 7.6886 7.6665	1521.2 1520.7 1520.1 1519.6 1519.1 1518.6 1518.1 1517.6 1517.1	7-6249 + 9 7-6005 7-5762 7-5519 7-5517 7-5035 7-4794 7-4554 7-4314 7-4075	2.0007 2.0005 2.0123 2.0123 2.0180 2.0239 2.0239 2.0297 2.0355 2.0473	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-2000 -1900 -1800 -1700 -1600 -1500 -1300 -1300 -1100	-2000 -1900 -1800 -1700 -1800 -1500 -1400 -1300 -1100	32.180 32.180 32.180 32.179 32.179 32.179 32.178 32.178 32.178	2.6082 + 0 2.6007 2.5932 2.5857 2.5782 2.5707 2.5632 2.5538 2.5833 2.5833	28047. 28029. 28010. 27991. 27972. 27954. 27935. 27916. 27897. 27879.	7-6444 +23 7-6223 7-6003 7-5784 7-5586 7-5346 7-5126 7-4694 7-4477	1516.0 1515.5 1515.0 1514.5 1514.0 1513.5 1513.0 1512.4 1511.9	7.3837 + 9 7.3599 7.3362 7.3125 7.2889 7.2654 7.2419 7.2184 7.1751	2.0532 - 7 2.0592 2.0651 2.0711 2.0771 2.0831 2.0892 2.0952 2.1013	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.965 28.964

TABLE 立一Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

	 ,			ODZ, LIVOL		<i>≨</i> , _,		
Altitude	Accel. due to	Specific	Pressure scale	Number density	Particle speed	Collision frequency	Mean free	Molecular weight
Z, ft H,	ft gravity g,ft sec	weight ω, lb ft ⁻² sec ⁻²	height H _P , ff	n, ft ⁻³	∇, ft sec¯'	ν , sec	Ľ, ft	M
-9000 -90 -8900 -89 -8800 -88 -8700 -86 -8500 -85	04 32.202 04 32.201 04 32.201 04 32.201 05 52.200	3.1799 + 0 3.1711 3.1624 3.1536 3.1449 3.1362	29360. 29341. 29323. 29304. 29285. 29266.	9.3136 +23 9.2880 9.2624 9.2368 9.2113 9.1859	1551.6 1551.1 1550.6 1550.1 1549.6 1549.1	9.2072 + 9 9.1789 9.1506 9.1224 9.0943 9.0662	1.6852 - 7 1.6899 1.6946 1.6992 1.7040 1-7087	28.964 28.964 28.964 28.964 28.964 28.964
-8400 -84 -8300 -83 -8200 -82 -8100 -81	03 32.200 03 32.199	3.1275 3.1188 3.1101 3.1015	29248. 29229. 29210. 29191.	9.1605 9.1352 9.1099 9.0847	1548.6 1548.1 1547.6 1547.1	9.0382 9.0103 8.9824 3.9546	1.7134 1.7182 1.7229 1.7277	28.964 28.964 28.964 28.964 28.964
-8000 -80 -7900 -78 -7800 -78 -7700 -77 -7600 -75 -7500 -75 -7400 -74 -7300 -73 -7200 -72 -7100 -71	03 32.198 03 32.198 03 32.198 03 32.198 32.197 03 32.197 03 32.197 04 32.197	3.0929 + 0 3.0842 3.0757 3.0671 3.0585 3.0500 3.0415 3.0330 3.0245 3.0161	29173. 29154. 29135. 29136. 29098. 29079. 29060. 29041. 29023. 29004.	9.0595 +23 9.0344 9.0093 8.9843 8.9593 8.95344 8.9096 6.8848 8.8600 8.8553	1546.6 1545.6 1545.6 1544.6 1544.6 1544.1 1543.6 1543.1 1542.6 1542.1	8.9269 + 9 8.8992 8.8717 8.8441 8.8167 8.7893 8.7620 8.7347 8.7076	1.7325 - 7 1.7373 1.7422 1.7470 1.7519 1.7568 1.7617 1.7666 1.7715	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-7000 -70 -6900 -69 -6800 -68 -6700 -67 -6600 -66 -6500 -65 -6400 -64 -6300 -63 -6200 -62	02 32.195 02 32.195 02 32.195 02 32.194 02 32.194 02 32.193	3.0076 + 0 2.9992 2.9908 2.9824 2.9740 2.9557 2.9574 2.9491 2.9408 2.9325	28985. 28966. 28948. 28929. 28910. 28871. 28873. 28835. 28835.	8.8107 +23 8.7861 8.7616 8.7371 8.7127 8.6883 8.6640 8.3397 5.6155 8.5913	1541.5 1541.0 1540.5 1540.0 1539.5 1539.0 1538.5 1538.0 1537.5 1537.0	8-6534 + 9 8-6264 8-5995 8-5726 8-5459 8-5459 8-4925 8-4659 8-4330	1.7814 - 7 1.7864 1.7914 1.7914 1.8015 1.8065 1.8116 1.8167 1.8269	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-6000 -60 -5900 -59 -5800 -58 -5700 -57 -5600 -56 -5500 -55 -5400 -54 -5300 -53 -5200 -52 -5100 -51	02 32.192 02 32.192 02 32.192 02 32.191 01 32.191 01 32.191 01 32.190 01 32.190	2.9242 + 0 2.9160 2.9078 2.8990 2.8914 2.8832 2.8750 2.8669 2.8568 2.8507	28798- 28779- 26760- 28741- 28723- 28704- 28685- 28648- 28648- 28629-	8.5672 +23 8.5831 6.5191 8.4951 8.4712 3.4474 8.236 8.3998 8.3781 0.3525	1536.0 1535.5 1535.0 1535.0 1534.4 1533.9 1532.9 1532.4 1531.9	8.3866 + 9 8.3603 8.3340 8.3078 6.2817 8.2296 8.2296 8.2237 8.1778 8.1520	1.8321 - 7 1.8372 1.8424 1.8476 1.8528 1.8528 1.8533 1.8666 1.8739 1.8792	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-5000 -50 -4900 -49 -4800 -48 -4700 -47 -4600 -46 -4500 -46 -4500 -43 -4200 -43 -4100 -41	01 32.189 01 32.189 01 32.189 01 32.188 01 32.188 01 32.188 01 32.187	2.8426 + 0 2.9345 2.8265 2.8185 2.8185 2.8025 2.7945 2.7786 2.7707	28610. 28591. 28573. 285354. 28535. 28146. 28479. 28460. 28441.	8.3289 +23 8.3053 8.2818 8.2858 8.2350 8.2116 6.888 8.1651 8.1419	1531.4 1530.9 1530.4 1529.9 1529.4 1528.8 1528.3 1527.8 1527.3 1526.8	8.1263 + 9 8.1006 8.0750 8.0495 8.0240 7.9986 7.9733 7.9480 7.9223 7.8976	1.8845 - 7 1.8898 1.8952 1.9006 1.9010 1.9114 1.9168 1.9223 1.9275	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-\(\)000 -\(\)000 -\(\)000 -\(\)3900 -\(\)3900 -\(\)3700 -\(\)3600 -\(\)3500 -\(\)3500 -\(\)3400 -\(\)3400 -\(\)3300 -\(\)3200 -\(\)3200 -\(\)3200 -\(\)3100 -\(\)3100 -\(\)3	01 32.186 01 32.186 01 32.185 01 32.185 01 32.185 01 32.185 01 32.184	2-7628 + 0 2-7549 2-7470 2-7391 2-7313 2-7235 2-7157 2-7079 2-7001 2-6924	28423. 28404. 28385. 28366. 28348. 28329. 28310. 28273. 28273.	8.0957 +23 8.0727 8.0497 8.0267 8.0038 7.9810 7.9582 7.9355 7.9128 7.8902	1526.3 1525.3 1525.3 1524.8 1524.2 1523.7 1523.2 1522.7 1522.7	7.8725 + 9 7.8475 7.8225 7.7976 7.7728 7.77480 7.7233 7.6986 7.6740 7.6495	1.9388 - 7: 1.9449 1.9499 1.9554 1.9610 1.9666 1.9723 1.9779 1.9836 1.9893	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-3000 -30 -2900 -29 -2800 -28 -2700 -27 -2600 -26 -2500 -25 -2400 -24 -2300 -23 -2200 -22 -2100 -21	00 32.183 00 32.183 00 32.182 00 32.182 00 32.182 00 32.181 00 32.181	2.6847 + 0 2.6769 2.6692 2.6616 2.6539 2.6462 2.6386 2.6380 2.6234 2.6158	28235. 28216. 28197. 28179. 28160. 28141. 28122. 28104. 28085. 28066.	7.8676 +23 7.8450 7.8225 7.8001 7.7777 7.7777 7.7331 7.7331 7.7108 7.6886 7.66°5	1521.2 1520.7 1520.2 1519.6 1519.1 1518.6 1518.1 1517.6 1517.1	7.6250 + 9 7.6006 7.5763 7.5763 7.5278 7.5036 7.4775 7.4755 7.4555 7.4315 7.4076	1.9950 - 7 2.0007 2.0065 2.0122 2.0180 2.0238 2.0297 2.02555 2.0414 2.0473	28.954 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
-2000 -20 -1900 -19 -1800 -18 -1700 -17 -1600 -16 -1500 -15 -1400 -14 -1300 -13 -1200 -12	00 32.180 00 32.180 00 32.179 00 32.179 00 32.178 00 32.178	2.6083 + 0 2.6007 2.5932 2.5857 2.5782 2.5707 2.5632 2.5558 2.5484 2.5409	28047. 28029. 28010. 27991. 27972. 27958. 27935. 27916. 27879.	7.6444 +23 7.6224 7.6004 7.5784 7.5565 7.5347 7.5129 7.4911 7.4694 7.4478	1516.0 1515.5 1515.0 1514.5 1514.5 1513.5 1513.0 1512.4 1511.9	7.3837 + 9 7.3599 7.3352 7.3125 7.2889 7.2254 7.2419 7.2185 7.1718	2.0532 - 7 2.0592 2.0651 2.0771 2.0771 2.0831 2.0892 2.0992 2.1013 2.1074	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
<u> </u>		<u> </u>						

TABLE V.—Continued.

GEOPOTENTIAL ALTITUDE, ENGLISH UNITS.

Alti	tude	Accel.	i Openino	Pressure scale	Number	Particle		Mean free	
		due 10	1	height	density	speed	frequency	path	weight
H, ft	Z, ff	a, ft sec 2	weight ω, lb ft ⁻² sec ⁻²	H _{P2} ff	. n, fṭ ^{-ā}	∇, ft sec '		L, ft	M
			1	Į.					
-1000 -900	-1000 -900	32.177 32.177	2.5335: + 0 2.5262	27860. 27841.	7.4261 +23 7.4046	1510.9 1510.5	7-1485 + 9	2.1136 - 7	28.964
-800	-800	32.177	2.5188	27822	7.3831	1509.9	7.1253 7.1022	2.1197 2.1259	28.96
-700	-700	32.176	2.5114	27804.	7.3616	1509.3	7.0792	2.1321	28.964
600	-600	32.176	2.5041	27785.	7.3402	1508.8	7.0561	2.1393	28.964
-500	~500	32.176	2.4968	27766.	7.3188	1508.3	7.0332	2.1446	28.964
-400	-400	32.175	2.4895	27747.	7.2975	1507.8	7.0103	2.1508	28.964
-300	-300	32.175	2.4822	27729.	7.2762	1507.3	6.9875	2.1571	28.964
-200	-200	32.175	2.4750	27710.	7.2550	1506.8	6.9647	2.1634	28.964
-100	-100	32.174	2.4677	27691.	7.2338	1506.2	6.9420	2.1698	28.964
0	0	32.174	2.4605 + 0	27672.	7.2127 +23	1505.7	6.9193 + 9		25.964
100 200	100 200	32.174 32.173	2.4533 2.4461	27654. 27635.	7.1916 7.1706	1505.2 1504.7	6.8967 6.8742	2.1825 2.1889	28.964 28.964
300	300	32.173	2.4389	27616.	7.51496	1504.2	6.8517	2.1953	28.964
40 <u>,0</u>	400	32.173	2.4317	27597.	7.1287	1503.7	6.8293	2.2018	28.964
500	500	32.173 32.172 32.172 32.172	2.4246	27578.	7.1078	1503.1	6.8069	2.2082	28.964
600.	600	32.172	2.4174	27560. 27541.	7.0869	1502.6 1502.1	6.7846	2.2147	28.964
700 800	700	32.172	2.4103	27541.	7-0661	1502.1	6.7624	2.2213	28.96
900	800 900	32.172	2.4032 2.3961	27522. 27503.	7.0454 7.0247	1501.6 1501.1	6.7402 6.7181	2.2278 2.2344	28.96
1000	1000	32.171	2.3891 + 0	27485.	7.0040 +23	1500.5	6.6960 + 9	2.2410 - 7	28.96
1100	1100	32.171	2.3820	27466.	69834	1500.0	6.6740	2.2476	28.96
1200	1200	32.170 32.170	2.3750	27447.	6.9628	1499.5	6.6520	2.2542	28.96
1300	1300	32.170	2.3679	27428.	6.9423	1499.0	6-6301	2.2609	28.96
1400 1500	1400 1500	32.170	2.3609 2.3539	27410. 27391.	6.9218	1498.5	6.6082 6.5865	2.2676	28.96
1600	1600	32.169 32.169	2.3470	27372.	6.8810	1497.4	6.5647	2.2743 2.2810	28.96
1700	1700	32.169	2.3400	27353.	6.8607	1496.9	6.5430	2.2878	28.96
1800	1800	32.168	2.3331	27335.	6.8404	1496.4	6.5214	2.2946	28.96
1900	1900	32.168	2.3261	27316.	6.8201	1495.9	6.4999	2.3014	28.98
2000	2000	32.168	2.3192 + 0	27297.	6.7999 +23	1495.3	6.4784 + 9	2.3082 - 7	28.96
2100	2100	32.168	2.3123	27278.	6.7798	1494.8	6-4569	243151	28.96
2200	2200	32.167	2.3055 2.2986	27259. 27241.	6.7597 6.7396	1494.3	6.4355 6.4142	2.3219 2.3289	28.96
2300 2400	2300 2400	32.167	2.2917	27222	6.7196	1493.8	6.3929	2.3358	28.96
2500	2500	32.166	2.2849	27203.	6.69.96	1492.7	6.3717	2.3428	28.96
2600	2600	32.166	2.2781	27203. 27184.	6.5797	1492.2	6.3717 6.3505	2.3497	28.96
2700	2700	32.166	2.2713	27166.	6.6598	1491.7	6.3294	2.3568	28.96
2800 2900	2800 2900	32.165 32.165	2.2645 2.2577	27147. 27128.	6.6400	1491.2	6.3294 6.3083 6.2873	2.3638 2.3709	28.96 28.96
3000	3000	32.165	2.2510 + 0	27109.	6.6005 +23	1490.1	6.2664 + 9	2.3780 - 7	28.96
3100	3100	32.164	2.2442	27091.	6.5808	1489.6	6-2455	2.3851	28.96
3200	3200	32.164	2.2375	27072.	6.5611	1489.1	6-2246	2.3922	28.96
3300	330 1	32.164	2.2308	27053.	6.5415	1488.5	6.2038	2.3994	28.96
3400	3401	32.164	2.2241	27034.	6.5219	1488.0	6.1831	2.4066	28.96
3500	3501	32.163	2.2174	27015. 26997.	6.5024	1487.5	6.1624	2.4138	28.96
3600	3601	32.163	2.2108	26997.	6.4830	1487.0	6.1418	2.4211	28.96
3700	3701	32.163	2-2041	26978.	6.4635	1486.4	6.1212	2.4283	28.96
3800 3900	3801 3901	32.162 32.162	2.1975 2.1909	26959. 26940.	6.4441 6.4248	1485.9	6.1007 6.0803	2.4356 2.4430	28.96 28.96
4000	4001	32.162	213843 + 0	26922.	6.4055 +23	1484.9	6.0599 + 9	2.4503 - 7	28.96
4100	4101	32.161	2.1777	26903.	6.3863	1484.3	6.0395	2.4577	28.96
4200	4201	32.161	2.1711	26884.	6.3670	1483.8	6.0192	2.4651	28.96
¥300	4301	32.161	2.1646	26865.	6.3479	1483.3	5.9990	2.4726	28.96
1400	<u> </u>	32-160	2.1580	26846.	6.3288	148258	5-9788	2.4800 2.4875	28.96
4500 4600	4501 4601	32.160 32.160	2.1515 2.1450	26828. 26809.	6.3097	1482.2 1481.7	5.9587 5.9386	2.4875 2.4951	28.96 28.96
4700	4701	32.160	2.1385	26790.	6.2717	1481.2	5.9186	2.5026	28.96
480G.	4801	32.159	2.1320	26771.	6.2527	1480.7	5.8986	2.5102	28.96
4900	4901	32.159	2.1256	26753.	6.2336	1480.1	5.8787	2.5178	28.96
5000	5001	32.159	2.1191 + 0	26734.	6.2150 +23	1479.6	5.8588 + 9	2.5255 - 7	28.96
5100	5101	32.158	2,1127	26715.	6.1962	1479.1	5.8390	2.5331	28.96
5200 5300	5201 5301	32.158 32.158	2.1063 2.0999	26696. 26677.	6.1774 6.1587	1478.6	5.8192 5.7995	2.5408 2.5485	28.96 28.96
5400	5401	32.157	2.0979	26559.	6.1400	1477.5	5.7799	2.5563	28.96
5500	5501	32.157	2.0871	26640	6.1214	1477.0	5.7603	2.5641	28.96
5600	5602	32.157	2.0807	26521.	6.1028	1476.5	5.7407	2.5719	28.96
5700	5702	32.156	2.0744	26602.	6.0842	1475.9	5.7212	2,5797	28.96
580J 5900	5802 5902	32.156 32.156	2.0681 2.0617	26584. 26565.	6.0657 6.0472	1475.4 1474.9	5.7018 5.6824	2.5876 2.5955	28.96 28.96
6000	6002	32.156	2.0554 + 0	26546.	6.0288 +23	1474.3	5.6630 + 9	2.6034 - 7	28.96
6100	6102	32.155	2.0492	26527.	6.0104	1473.8	5.6438	2.6114	28.96
6200	6202	32.155	2.0429	26508	5.9921	1473.3	5.6245	2.6194	28.96
6300	9305	32.155	2.0366	26490.	5.9738	1472.8	5.6053	2.6274	23.96
6400	6402	32.154	2.0304	26471.	5.9556	1472.2	5.5862	2.6355	28.96
6500	6502	32,154	2.0242	26452.	5.9373	1471.7	5.5671	2.6435	28.96
6600	6602	32.154	2.0179	26433.	5.9192	147.1.2	5.5481	2.6517	28.94
6700	6702	32 - 153	2.0117	26414.	5,9011	1470-6	5.5291	2.6598	28.96
0086	6802 -6902	32.153 32.153	2.0056 1.9994	26396.	5.8830	1470-1	5.5102 5.4913	2.6680	28.96
6900				26377.	5.8649	1469.6		2.6762	

TABLE X.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

	,-				ODE, ENGE	· · · · · · · · · · · · · · · · · · ·			· · · · ·
Altii	lude	Accel. due to	Specific weight	scale	Number density	Particle speed		Mean free	Molecular weight
Z, ft	H, ft	gravity g, it sec ⁻²	weight ω, lb ft ⁻² sec ⁻²	H _P , ft	n, ft ⁻⁸	∇, ft sec	ν , sec ⁻¹	L, ft	M
-1000 -900 -800 -700	-1000 -900 -800 -700	32.177 32.177 32.177 32.176	2.5335 + 0 2.5262 2.5188 2.5115	27860. 27841. 27822. 27804.	7.3616	1510.9 1510.4 1509.9 1509.3	7.1485 + 9 7.1254 7.1022 7.0792	2.1136 - 7 2.1197 2.1259 2.1321	28.964 28.964 28.964 28.964
-600 -500 -400 -300 -200	-600 -500 -400 -300 -200	32.176 32.176 32.175 32.175 32.175	2.5041 2.4968 2.4895 2.4822 2.4750	27785. 27766. 27747. 27729. 27710.	7.3402 7.3188 7.2975 7.2762 7.2550	1508.8 1508.3 1507.8 1507.3	7.0561 7.0332 7.0103 6.9875 6.9647	2.1383 2.1446 2.1508 2.1571	28.964 28.964 28.964 28.964
-100	-100	32.174	2.4677	27691.	7.2338	1506.2	6.9420 6.9193 + 9	2.1634 2.1698	28.964 28.964 28.964
100 200	100 200	32.174 32.173	2.4533. 2.4461	27654. 27635.	7.1916 7.1706	1505.2	6.8967 6.8742	2.1825 2.1889	28.964 28.964
300 400 500 600 700	300 400 500 600 700	32.173 32.173 32.173 32.172 32.172	2.4389 2.4317 2.4246 2.4174 2.4103	27616. 27597. 27578. 27560. 27541.	7.1496 7.1287 7.1078 7.0869 7.0661	1504.2 1504.2 1503.7 1503.1 1502.6 1502.1	6.8517 6.8293 6.8069 6.7846 6.7624	2.1953 2.2018 2.2082 2.2147 2.2213	28.964 28.964 28.964 28.964 28.964
800 900 1000	900	32.172 32.171	2-4032 2-3961	27522. 27503.	7.0454 7.0247	1501.6 1501.1	6.7502 6.7.181	2.2278	28.964
1100 1200 1300 1400 1500 1600 1700 1800	1000 1100 1200 1300 1400 1500 1600 1700 1800	32.171 32.171 32.170 32.170 32.170 32.169 32.169 32.169 32.168 32.168	2-3891 + 0 2-3820 2-3750 2-3680 2-3680 2-3540 2-3470 2-3470 2-3331 2-3262	27485. 27466. 27447. 27428. 27410. 27391. 27372. 27353. 27353.	7.0040 +23 6.9834 6.9628 6.9423 6.9218 6.9014 6.8810 6.8607 6.8808	1500-5 1500-0 1499-5 1499-0 1498-5 1497-9 1496-9 1496-9 1495-9	6-6960 + 9 6-6740 6-6520 6-6301 6-6083 6-5865 6-5647 6-5215 6-5215 6-4999	2.2410 - 7 2.2476 2.2542 2.2609 2.2676 2.2743 2.2810 2.2878 2.2945 2.3014	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
2000 2100 2200 2300 2400 2500 2600 2700 2800 2900	2000 2100 2200 2300 2400 2500 2600 2700 2800 2900	32.168 32.165 32.167 32.167 32.167 32.166 32.166 32.165 32.165	2.3192 ÷ 0 2.3124 2.3055 2.2986 2.2918 2.2899 2.2781 2.2713 2.2645 2.2578	27297. 27278. 27259. 27241. 27222. 27203. 27184. 27166. 27147. 27128.	6.8000 +23 6.7798 6.7597 6.7597 6.7197 6.6997 6.6798 6.6599 6.6401 6.6203	1495.3 1494.8 1494.3 1493.8 1493.3 1492.7 1492.2 1491.7 1491.6	6.4784 + 9 6.4569 6.4356 6.4142 6.3929 6.3717 6.3506 6.3294 6.3084 6.2874	2.3082 - 7 2.3150 2.3219 2.3288 2.3358 2.3427 2.3497 2.3567 2.3638 2.3708	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
3000 3100 3200 3300 3400 3500 3600 3700 3800 3900	3000 3100 3200 3299 3399 3499 3599 3699 3799	32.165 32.164 32.164 32.164 32.163 32.163 32.163 32.163 32.163 32.162	2-2510 + 0 2-2443 2-2376 2-2308 2-2242 2-2175 2-2108 2-2042 2-1975 2-1909	27109. 27091. 27072. 27053. 27034. 27016. 26997. 26978. 26959. 26940.	6.6006 +23 6.5809 6.5612 6.5816 6.5221 6.5221 6.4831 6.4637 6.4433 6.4249	1490.1 1489.6 1489.1 1488.5 1488.0 1487.5 1487.0 1486.5 1485.9 1485.4	6.266% + 9 6.2456 6.2247 6.2039 6.1832 6.1626 6.1419 6.1214 6.1009 6.080%	2.3779 - 7 2.3850 2.3922 2.3994 2.4065 2.4138 2.4210 2.4283 2.4356 2.4429	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
4000. 4100 4200 4300 4400 4500 4600 4700 4800 4900	3999 4099 4199 4399 4399 4499 4599 4699 4799	32.162 32.161 32.161 32.160 32.160 32.160 32.160 32.159 32.159	2.1843 + 0 2.1778 2.1712 2.1646 2.1581 2.1516 2.1451 2.1386 2.1386 2.1321 2.1256	26922. 26903. 26884. 26865. 26847. 26828. 26309. 26790. 26772. 26753.	6.4057 +23 6.3864 6.3672 6.3481 6.3289 6.3099 6.2909 6.2719 6.2529 6.2340	1484.9 1484.4 1483.8 1483.3 1482.8 1482.3 1461.7 1461.2 1480.7	6.0600 + 9 6.0397 6.0194 5.9992 5.9790 5.9589 5.9388 5.9188 5.8988 5.8988	2.4503 - 7 2.4577 2.4651 2.4725 2.4800 2.4875 2.4950 2.5025 2.5101 2.5177	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
5000 5100 5200 5300 5400 5500 5600 5700 5800 5900	4999 5099 5199 5299 5399 5499 5598 5698 5798 5898	32.159 32.158 32.158 32.158 32.157 32.157 32.157 32.156 32.156 32.156	2.1192 + 0 2.1128 2.1063 2.0999 2.0936 2.0872 2.0808 2.0745 2.0682 2.0618	26734. 26715. 26696. 26678. 26659. 26540. 26621. 26603. 26584. 26565.	6-2152 +23 6-196% 6-1577% 6-1589 6-1403 6-1216 6-1030 6-0845 6-0660 6-0475	1479.6 1479.1 1478.6 1478.0 1477.5 1477.0 1476.5 1475.9 1475.4 1474.9	5.8590 + 9 5.8392 5.8195 5.7998 5.7801 5.7605 5.7410 5.7215 5.7021 5.6827	2.5254 - 7 2.5330 2.5407 2.5484 2.5562 2.5640 2.5718 2.5796 2.5796 2.5875 2.5954	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
6000 6100 6200 6300 6400 6500 6400 6700 6800 6900	5998 6098 6198 6298 6398 6498 6598 6698 6798 6898	32.156 32.155 32.155 32.155 32.154 32.154 32.154 32.153 32.153	2.0555 + 0 2.0493 2.0430 2.0367 2.0305 2.0243 2.0119 2.0119 2.0057 1.9995	26546. 26528. 26509. 26490. 26471. 26452. 26434. 26415. 26377.	6.0291 +23 6.0108 5.9924 5.9742 5.9759 5.9377 5.9196 5.9014 5.8834 5.8654	1474.3 1473.8 1473.3 1472.8 1472.2 1471.7 1471.2 1470.6 1470.1	5.6634 + 9 5.6249 5.6057 5.5866 5.5675 5.5485 5.5295 5.5295 5.5106 5.4937	2.6033 - 7 2.6113 2.6192 2.6273 2.6353 2.6353 2.6434 2.6515 2.6596 2.6678 2.6760	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE V.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Álti	ude	Accel.	Specific weight	Pressure scale height	Number density	Particle speed		Mean free path	Molecular weight
H, ft	Z, ft	gravity g, ft sec ⁻²	weigh ω, lb ft ⁻² sec ⁻²	H _P , ft	n, ft ⁻³ .	∇, ft sec ⁻¹		L, ft	M
7000 7100- 7200 7300 7400 7500 7600 7700 7800	7002 7102 7202 7303 7403 7503 7603 7703	32.152 32.152 32.152 32.151 32.151 32.151 32.151 32.150 32.150	1.9932 + 0 1.9871 1.9810 1.9749 1.9688 1.9627 1.9506 1.9506	26358. 26339. 26321. 26302. 26283. 26264. 26245. 26227. 26208.	5.8469 +23 5.8290 5.8111 5.7932 5.7754 5.7576 5.7399 5.7222 5.7045	1469.0 1468.5 1468.0 1467.4 1466.9 1466.4 1465.3 1464.8	5.4725 + 9 5.5537 5.4350 5.4163 5.3977 5.3791 5.3606 5.3421 5.3237	2.6844 - 7 2.6527 2.7010 2.7093 2.7177 2.7261 2.7345 2.7430 2.7515	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
7900 8100 8100 8300 8300 8500 8500 8600 8700 3800 8900	7903 8003 8103 8203 8303 8403 8503 8604 8704 8804	32.149 32.149 32.149 32.148 32.148 32.148 32.148 32.147 32.147	1.9385 1.9325. + 0 1.9265 1.9205 1.9186 1.9086 1.9027 1.8908 1.8908 1.8849	26189. 26170. 26151. 26133. 26114. 26076. 26076. 26037. 26039. 26001.	5.6869 5.6673 +23 5.6518 5.6343 5.6168 5.5994 5.5820 5.5647 5.5574 5.5302 5.5130	1464.3 1463.7 1463.2 1462.7 1462.1 1461.1 1460.5 1460.0 1459.5 1458.9	5.3053 5.2870 + 9 5.2687 5.2505 5.2524 5.2142 5.1761 5.1602 5.1781 5.1602 5.1423 5.1244	2.7600 2.7685 - 7 2.7771 2.7844 2.8031 2.8118 2.8206 2.8204 2.8294 2.832	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
9000 9100 9200 9300 9400 9500 9600 9700 9800 9900	9004 9104 9204 9304 9404 9504 9604 9705 9805 9905	32.146 32.146 32.145 32.145 32.145 32.145 32.144 32.144 32.144	1.8732 + 0 1.8673 1.8673 1.86557 1.8557 1.8499 1.6441 1.8383 1.8325 1.82267	25982 25964 25945 25926 25927 25888 25870 25851 25832 25813	5.4958 +23 5.4787 5.4616 5.4276 5.4106 5.3937 5.3768 5.3600 5.3432	1458.4 1457.9 1457.3 1456.8 1456.3 1455.7 1455.2 1454.6 1454.1	5.1066 + 9 5.0888 5.0711 5.0534 5.0357 5.0182 5.0006 4.9832 4.9657 4.9483	2.8559 - 7 2.8648 2.8738 2.8828 2.8918 2.9009 2.9100 2.9191 2.9283 2.9375	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
10000 10100 10200 10300 10400 10500 10600 10700 10800	10005 10105 10205 10305 10405 10505 10605 10705 10806 10906	32-143 32-143 32-143 32-142 32-142 32-142 32-141 32-141 32-141	1.8153 + 0 1.8096 1.8039 1.7982 1.7925 1.7868 1.7812 1.7756 1.7659 1.7643	2579%. 25776. 25757. 25738. 25719. 25700. 25682. 25648. 25644.	5.3264 +23 5.3097 5.2930 5.2764 5.2598 5.2433 5.2267 5.2103 5.1938 5.1774	1453.0 1452.5 1452.0 1451.4 1450.9 1450.4 1449.8 1449.3 1448.7	4.9310 + 9 4.9137 4.8965 4.8793 4.8621 4.8450 4.8280 4.8110 4.7771	2.9467 - 7 2.9560 2.9553 2.9747 2.9841 2.9935 3.0030 3.0125 3.0220 3.0316	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
11000 11100 11200 11300 11400 11500 11600 11700 11800	11006 11106 11206 11306 11406 11506 11606 11707 11807	32.140 32.140 32.139 32.139 32.139 32.138 32.138 32.138	1.7587 + 0 1.7532 1.7476 1.7421 1.7365 1.7310 1.7235 1.7235 1.7200 1.7145 1.7090	25606. 25588. 25589. 25550. 25531. 25512. 25494. 25475. 25456. 25437.	5.1611 +23 5.1447 5.1285 5.1122 5.0960 5.0799 5.0637 5.0477 5.0316 5.0156	1447-7 1446-6 1446-0 1445-5 1445-0 1443-9 1443-4 1443-8	4.7602 + 9 4.7434 4.7266 4.7099 4.6932 4.6766 4.6600 4.6435 4.6270 4.6106	3.0412 - 7 3.0508 3.0605 3.0702 3.0800 3.0898 3.0996 3.1095 3.1194 3.1294	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
12000 12100 12200 12300 12400 12500 12600 12700 12800	12007 12107 12207 12307 12407 12507 12508 12708 12808 12708	32.137 32.137 32.136 32.136 32.135 32.135 32.135 32.135 32.135	1.7036 + 0 1.6981 1.6927 1.6873 1.6819 1.6765 1.6711 1.6658 1.6604	25418. 25400. 25381. 25362. 25343. 25324. 25306. 25287. 25268. 25249.	4.9997 +23 4.9837 4.9678 4.9520 4.9362 4.9204 4.9047 4.8890 4.8733 4.8577	1442.3 1441.2 1440.6 1440.1 1439.6 1439.0 1438.5 1437.9	4.5942 + 9 4.5778 4.56153 4.5290 4.5129 4.4968 4.4807 4.4887	3.1393 - 7 3.1494 3.1595 3.1696 3.1797 3.1899 5.2001 3.2104 3.2207	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
13000 13100 13200 13300 13400 13500 13600 13700 13800	13008 13108 13208 13308 13409 13509 13609 13709 13809 13909	32.134 32.134 32.133 32.133 32.133 32.132 32.132 32.132 32.132	1.6497 + 0 1.6444 1.6391 1.6339 1.6286 1.6233 1.6181 1.6128 1.6024	25230. 25211. 25193. 25174. 25155. 25136. 25117. 25099. 25080. 25061.	4.8421 +23 4.8266 4.8111 4.7756 4.7802 4.7648 4.77495 4.7341 4.7189 4.7036	1436.9 1435.8 1435.2 1435.2 1434.7 1433.6 1433.6 1433.1 1432.0	4.4327 + 9 4.4168 4.4010 4.3852 4.3694 4.3537 4.3380 4.3224 4.3068 4.2913	3.2415 - 7 3.2519 3.2624 3.2729 3.2835 3.2941 3.3047 3.3154 3.3261 3.3369	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
14000 14100 14200 14300 14500 14500 14700 14800 14900	14009 14110 14210 14310 14410 14510 14610 14710 14811 14911	32.131 32.131 32.130 32.130 32.130 32.129 32.129 32.129 32.129 32.128	1.5972 + 0 1.5921 1.5869 1.5817 1.5765 1.5715 1.5663 1.5663 1.5561 1.55511	25042. 25023. 25005. 24986. 24987. 24948. 24929. 24911. 24892. 24873.	4.6884 +23 4.6733 4.6582 4.6431 4.6280 4.5130 4.5980 4.5831 4.5682 4.5533	1431.4 1430.9 1430.3 1429.8 1429.8 1428.7 1428.2 1427.6 1427.1	4.2758 + 9 4.2603 4.2449 4.2296 4.2143 4.1990 4.1638 4.1534 4.1534	3.3477 - 7 3.3586 3.3695 3.3804 3.3914 3.4025 3.4247 3.4359 3.4471	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

Altit	 	Accel.	Specific	Pressure scale	Number density	Particle speed	frequency	Mean free path	Molecule weight
, ft	H, ff	g, ft sec ⁻²	weight ω, lb ft ⁻² sec ⁻²	H _P , ff	n, ft ^{-á}	∇, ft sec¯¹	ν , sec ⁻¹	L, ft	M
7000	6998	32.152	1.9934 + 0	26359.	:5,8474 +23	1469.1	5.4729 + 9	2.6842 - 7	28.964
7100	7098	32.152	1.9873	26359. 26340. 26321. 26302. 26283. 26265. 26246. 26227. 26208.	5.8294	1468.5	5.4542	2.6842 - 7 2.6925 2.7008 2.7091 2.7175 2.7258	28.964
7200	7198	32-152	1.9811	26321.	5.8115	1468.0 1467.5 1466.9	5.4354	2.7008	28.964
7300 7400	7707	32.152 32.151	1.9750	26302.	5.7937 5.7759	1407-5	5.4168 5.3982	2.7091	28.964
7500	7297 7397 7497	32.151	1.9629	26265	5.7581	1466.4	5.3704	2.7258	28.964
7600	7597	32.151	1.9568	26286	5.7403	1465.9	5.3792 5.3796 5.3611 5.3426 5.3242	1 2-7545	28.964
7700	7697	32, 150	1.9507	26227.	5.7227	1465.3	5.3426	2.7427	28.964
7800	7797 7897	32.150	1.9447	26208.	5.7050	1464.8	5.3242	2.7512	28.964
7900		32.150	1.9387	200,000	5.6874	1464.3	5.3059	2.7427 2.7512 2.7597	28.964
8000 8100	7997 8097	32.149 32.149 32.149	1.9327 + 0	26171. 26152. 26133. 26114.	5.6698 +23	1463.7	5.2876 + 9	2.7683 - 7	28.964
8200	81.97	32.149	1.9267	20132.	5.6523 5.6348	1463.2 1462.7	5.2693 5.2511	2.7769 2.7855	28.964
8300	829.7	32 149	1.9148	261334	. 5.6174	1462.1	5.2330	2.7941	28.964
8400	8307	32.148	1.9088	26096.	5.6000	1861-6	5-2148	2.8028	28.964
8500	8397 8497	32.148 32.148 32.148	1.9029	26077.	5.5826	1461.6	5.2148 5.1968	2.8115	28.964
8600	8596	32.148	1.8969	26058.	5.5653	1460.5	5.1788	2.8203	28.964
8700	8696	32.147	1.8910	26039.	5.5481	1460.0	5.1788 5.1608	2.8290	28.964
8800	87.96	32.147	1.8852	26021.	5.5308	1459.5	5.1429	2.8378	28.964
8900	8896	32.147	1.8793	26002.	5.5136	1458.9	5-1251	2.8467	28.964
9000 9100	8994 9096	32.146 32.146	1.8734 + 0 1.8676	25983. 25964.	5.4965 +23 5.4794	1458.4 1457.9	5.1072 + 9 5.0895	2.8556 - 7 2.8645	28.96
9200	9196	32.146	1.8617	25945.	5.4623	1457.3	5.0718	2.8734	28.96
9300	9296	32.145	1.8559	25927.	5.4453	1456.8	5.0541	2.8824	28.96
9400	9396	32.145	1.8559	25908	5.4283	1456.3	5.0365	2.8914	28.96
9500	9496	32.145 32.144	1.8443	25889	5.4114	1455.7 1455.2	5.0189	2.9005	28.96
9600	9596	32.144	1.8385	25870.	5.3944	1455.2	5.0014	2.9096	28.96
9700	9695	32.144	1.8328	25852.	5.3776	1454.7	4.9839	2.9187	28.96
9800 9900	9795 9895	32.144 32.144	1.8270	25833. 25814.	5.3608 5.3440	1454.1 1453.6	4.9665 4.9491	2.9279 2.9371	28.96
10000	9995	32.143 32.143 32.143	1.8155 + 0 1.8098 1.8041 1.7985 1.7928 1.7871	25795.	5.3272 +23	1453.1 1452.5 1452.0	4.9318 + 9 4.9145 4.8973	2.9463 - 7	28.96
10100	10095	32.143	1.8098	25795. 25776.	5.3105	1452.5	4.9145	2.9556	28.96
10200	10195	32.143	1.8041	25758.	5.2939	1452.0	4.8973	2.9649	28.96
10300	10295 10395 10495	32.142	1.7985	25739.	5.2772	1 1451.5	4.8801	2.9742	28.96
10400	10395	32.142	1.7928	25720.	5.2607	1450.9 1450.4	4.8630 4.8459	2.9836	28.96
10500	10495	32.142 32.142 32.142 32.141	1.7871	25701.	5.2441	1450.4	4.8459	2.9930	28.96
10600 10700	10373	32.141	101010	25683.	5.2276	1449.8	4.8289 4.8119	3.0024	28.96
10800	10595 10695 10794	32.141 32.141	1.7759 1.7703:	25664.	5.2112 5.1947	1449.3	4.7949	3.0119 3.0215	28.96
10900	10894	32.140	1.7647	25645. 25626.	5-1784	1449.3 1448.8 1448.2	4.7781	3.0310	28.96
11000	10994 11094 11194	32.140	1.7591 + 0	25607.	5.1620 +23	1447.7 1447.2 1446.6 1446.1	4.7612 + 9	3.0406 - 7	28.96
11100	11094	32-140	1.7535	25589.	5.1457	1447-2	4.7444 4.7277 4.7109	3.0502	28.96
11200	11194	32.140	1.7479	25570.	5-1294	1446.6	4.7277	3.0599	28.96
11300	11294	32.139	1.7424	25551. 25532.	5.1132 5.0970	1445.5	4.6943	3.0696* 3.0794	28.96
11400 11500	11394	32.139 32.139	1.7369	25514.	5.0809	1445.0	4.6777	3.0892	28.96
11600	11394 11494 11594	32.138	1.7258	25495	5.0648	1444.5	4.6611	3.0990	28.96
11700	11693	32.138	1.7203	25476.	5.0487	1443.9	4.6445	3.1088	28.96
11800 İ	11793 11893	32.138	1.7149	25457.	5.0327	1443.4	4.6281	3.1187	28.96
1:1900		32.137	1.7094	25438.	5.0167	1442.8	4.6117	3.1287	28.96
12000	11993	32.137	1.7040 + 0	25420.	5.0008 +23	1442.3	4.5953 + 9	3.1367 - 7	28.96
12100	12093	32.137	1.6985	25401. 25382.	4.9848	1441.8	4.5790 4.5627	3.1887 3.1587	28.96
12200	12195	32.136	1.6931	25352.	4.9690 h.0531	1441.2	4.5027 4.5464	3.1688	28.96
12300	12273	32.136 32.136	1 1 1 1 2 2 2 1	25363. 25345.	4.9531 4.9373	1440.1	4.5302	3.1790	28.96
12500	12493	32.134	1.6769	25324.	4.9216	1430.6	4.5141	3.1891	28.96
12600	12592	32.136 32.135	1.6715	25326. 25307.	1.0050	1439.1 1438.5	4.4980	3.100k	28.96
12700	12692	32.135	1.6662	25288.	4.8902	1438.5			28.96
12800	11993 12093 12193 12293 12393 12393 12493 12592 12692 12792 12892	32.135	1.6769 1.6715 1.6662 1.6608	25269. 25251.	4.8902 4.8746 4.8590	1438.0 1437.4	4.4659	3.2096 3.2199 3.2303	28.96
12900		ł	1.0333			T I		l .	28.96
13000	12992 13092	32.134	1.6502 + 0	25232. 25213.	4.8434 +23 · 4.8279	1436.9	4.4340 + 9 4.4181	3.2406 - 7 3.2511	28.96
13200	13192	32.133	1.6396	25194.	4.8124	1435.8	4.4023	3.2615	28.96
13300	13292	32.133	1.6343	25175.	4.7969	1435.3	4.3865	3.2720	28.96
13400	13391	32.133	1.6290	25157.	4-7815	1434.7	4.3708	3.2826	28.96
13500	13491	32-132	1.6238	25138.	4.7662	1434.2	4.3551	3.2931	28.96
13600	13591 13691	32.132	1.6185	25119. 25100.	4.7508 4.7355	1433.6	4.3394 4.3238	3.3038 3.3144	28.96
13800	13791	32.132	1.6081	25082.	4.7203	1432.6	4.3082	3.3252	28.96
13900	13891	32.131	1.6029	25063.	W.7050	1432.0	4.2927	3.3359	28.96
14000	13991	32 - 131	1.5977 + 0	25044. 25025.	4.6879 +23 4.6747	1431.5	4.2772 + 9 4.2618	3.3467 - 7 3.3576	28.96
14100	14090	32.131 32.130	1.5925 1.5874	25025. 25006.	4.6596	1430.4	4.2464	3.3684	28.96
14300	14290	32.130	1.5822	24988.	4.6445	1429.8	4.2311	3.3794	28.96
14400	14390	32.130	1.5771	24969.	4.6295	1429.3	4.2158	3.3903	28.96
14500	14490	32.129	1.5720	24950.	4.6145	1428.8	4.2005	3.4014	28.96
14600	14590	32.129	1.5669	24931	4.5996	1428.2	4.1853	3.4124	28.96
14700	14690	32.129	1.5618	24912.	4.5846	1427.7	4.1701	3.4235	28.96
	14790	32.128	1.5567	24894.	4.5698	1427.1	4.1550	3.4347	28.96
14800 14900	14889	32.128	1.5516	24875.	4.5549	1426.6	4.1399	3.4459	28.96

TABLE X.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altif	ude	Accel.		Pressure scale	Millimitar	Particle	Collision	Mean free	
H, ft	Z, fi	gravity g, ft sec ⁻²	weight w,lb ft ⁻² sec ²	height H _P , ft	n, ft ⁻⁸	V, ft sec	frequency ν , sec-1	L., ft	weight M
15000 15100 15200 15300 15400 15500 15700 15700 15800 15900	15011 15111 15211 15311 15411 15512 15612 15712 15812 15912	32.128 32.127 32.127 32.127 32.127 32.126 32.126 32.126 32.125 32.125	1.5460 + 0 1.5410 1.5359 1.5359 1.5259 1.5209 1.5159 1.5109 1.5059 1.5010	24854 • 24835 • 24835 • 24836 • 24798 • 24779 • 24741 • 24742 • 247685 • 24685 •	4.5385 +23 4.5237 4.5090 4.4942 4.4796 4.4649 5.503 4.4358 4.4358 4.4212 4.4067	1426-0: 1 1425-4: 1 1424-3: 1 1423-8: 1 1423-2: 1 1422-7 1422-1 1421-6 1421-0	4.1233 + 9 4.1083 4.0933 4.0784 4.0635 4.0635 4.0487 4.0339 4.0191 4.0084 3.9897	3.4503 - 7 3.4696 3.4810 3.4924 3.5038 3.5153 3.5269 3.5384 3.5501 3.5617	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
16000 16100 16200 16300 16400 16500 16600 16700 16800 16900	16012 16112 16213 16313 16413 16513 16613 16713 16814	32.125 32.124 32.124 32.124 32.123 32.123 32.123 32.123 32.123 32.123 32.123	1.4960 + 0 1.4911 1.4862 1.4863 1.4764 1.4715 1.4667 1.4668 1.4570 1.4521	24666. 24647. 24628. 24609. 24591. 245572. 24553. 24534. 24515. 2497.	4-3923 +23 4-3778 4-3635 4-3491 4-3205 4-3205 4-3063 4-2921 4-2779 4-2638	1419.4 1418.8 1478.3 1417.7 1417.2 1416.6	3.9751 + 9 3.9605 3.9460 3.9315 3.917G 3.9026 3.8882 3.8739 3.8596 3.8454	3.5735 - 7 3.5852 3.5971 3.6089 3.6209 3.6328 3.6448 3.65569 3.6690 3.6812	28.964 26.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
17000 17100 17200 17300 17500 17500 17600 17700 17800 17900	17014 17114 17214 17314 17415 17515 17615 17715 17815	32.122 32.121 32.121 32.121 32.120 32.120 32.120 32.119 32.119	1.4473 + 0 1.4425 1.4377 1.4330 1.4282 1.4234 1.4187 1.4187 1.4092 1.4045	24459. 24440. 24421. 24421. 24421. 24362. 24365. 24346. 24336. 24338.	4.2497 +23 0.2356 4.2216 4.2076 4.1936 4.1797 4.1658 4.1520 4.1520 4.1381 4.1244	1415.0 1414.4 1413.9 1413.3 1412.8 1412.2 1411.7 1411.1 1410.6 1410.0	3.8311 + 9 3.8170 3.8029 3.7888 3.7747 3.7607 3.7468 3.7329 3.7190 3.7051	3.6934 - 7 3.7057 3.7180 3.7303 3.7427 3.7552 3.7677 3.7803 3.7929 3.8056	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
18000 18100 18200 18300 18400 18500 18600 18600 18900	18016 18116 18216 18216 18416 18516 18617 18717 18817	32.119 32.118 32.118 32.117 32.117 32.117 32.117 32.116 32.116	1.3998 + 0 1.3952 1.3905 1.3858 1.3812 1.3766 1.3719 1.3673 1.3627	24289 • 24271 • 24252 • 24233 • 24214 • 24175 • 24175 • 24139 • 24120 •	4.1106 +23 4.0969 4.0832 4.0696 4.0560 4.0424 4.0289 4.0154 4.0019 3.9885	1409.5 1408.4 1407.8 1407.3 1406.7 1406.2 1405.6 1405.0 1404.5	3.6913 + 9 3.6776 3.6639 3.6502 3.6366 3.6230 3.6230 3.6094 3.5959 3.5690	3.8183 - 7 3.8311 3.8548 3.8568 3.8567 3.8827 3.8958 3.9089 3.9220 3.9352	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
19000 19100 19200 19300 19400 19500 19600 19700 19800 19900	19017 19118 19218 19318 19418 19518 19618 19719 19819	32.115 32.115 32.115 32.115 32.114 32.114 32.114 32.113 32.113	1.3536 + 0 1.3444 1.3399 1.3354 1.3309 1.3219 1.3219 1.3174.	24101- 24082- 24064- 24045- 24026- 24007- 23988- 23969- 23951- 23932-	3.9751 +23 3.9617 3.9484 3.9351 3.9351 3.9086 3.8954 3.8823 3.8692 3.8692	1403.9 1403.4 1402.8 1402.3 1401.7 1401.2 1400.6 1400.0 1399.5	3.5556 + 9 3.55289 3.55289 3.55624 3.4892 3.4892 3.44630 3.44630 3.44630	3.9485 - 7 3.9618 3.9752 3.9886 4.0021 4.0156 4.0292 4.0429 4.0566 4.0704	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
20000 20100 20200 20300 20400 20500 20600 20700 20800 20900	20019 20119 20220 20320 20420 20520 20620 20721 20821 20921	32.112 32.112 32.112 32.111 32.111 32.111 32.111 32.110 32.110	1.3085 + 0 1.3040 1.2996 1.2952 1.2907 1.2863 1.2820 1.2776 1.2776 1.2732	23913. 23894. 23875. 23856. 23838. 23819. 23800. 23781. 23762. 23743.	3.8430 +23 3.8300 3.8170 3.8040 3.77911 3.7782 3.7654 3.77526 3.7398 3.7270	1398.4 1397.8 1397.3 1396.7 1396.1 1395.6 1395.0 1394.5 1393.9	3.4238 + 9 3.4109 3.3980 3.3651 3.3722 3.3594 3.3467 3.3339 3.3212 3.3086	4.0842 - 7 4.0981 4.1120 4.1260 4.1401 4.15542 4.1684 4.1826 4.7969 4.2113	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
21000 21100 21200 21300 21400 21500 21600 21700 21800 21900	21021 21121 21222 21322 21422 21522 21622 21723 21823 21923	32.109 32.109 32.109 32.108 32.108 32.107 32.107 32.107 32.107	1.2645 + 0 1.2602 1.2559 1.2516 1.2473 1.2430 1.2387 1.2344 1.2302 1.2259	23725 23706 23687 23649 23630 23611 23593 23574 23555	3.7143 +23 3.7016 3.6890 3.6764 3.6638 3.6512 3.6387 3.6262 3.6137 3.6013	1392.8 1392.2 1391.7 1391.1 1390.5 1390.0 1389.4 1388.9 1388.3 1387.7	3.2960 + 9 3.2834 3.2708 3.2583 3.2459 3.2235 3.2211 3.2087 3.1964 3.1841	4.2257 - 7 4.2402 4.2547 4.2694 4.2840 4.2988 4.3135 4.3284 4.3433 4.3583	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
22000 22100 22200 22300 22400 22500 22600 22700 22800 22900	22023 22123 22224 22324 22424 22524 22625 22725 22725 22925	32.106 32.106 32.106 32.105 32.105 32.105 32.104 32.104 32.104	1.2217 + 0 1.2175 1.2133 1.2091 1.2049 1.2007 1.1966 1.1924 1.1883 1.1842	23536. 23517. 23498. 23480. 23441. 2342. 2342. 23404. 23365. 23367.	3.5889 +23 3.5766 3.5643 3.5569 3.5397 3.5275 3.5153 3.5031 3.4910 3.4789	1387.2 1386.6 1386.1 1385.5 1384.9 1384.4 1383.8 1383.2 1382.7 1382.1	3.1719 ÷ 9 3.1597 3.1475 3.1354 3.1233 3.1113 3.0992 3.0873 3.0753 3.0753	4,3733 - T 4,3885 4,4036 4,4189 4,4189 4,4495 4,4495 4,4650 4,4805 4,4961 4,5117	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

Altii	ude	Accel.	Specific weight	Pressure scale	Number density	Particle speed	Collision frequency	Mean free	Molecule weight
Z, ft	H, ff	gravity g, ft sec ⁻²	ω, lb ft ⁻² sec ⁻²	height H _P , \$f	n, ft ⁻⁸	⊽, ft sec'		L, ft	M
15000:	14989	32.128	1.5465 + 0	24856.	4.5401 +23	1426.0	4.1249 + 9	3.4571 - 7	28.964
15100	15089	32.128 32.127 32.127	1.5415	24837.	4.5253 4.5106	1425.5	4.1099	3.4684	28.964
15200	15189 15289 15389 15488 15588 15688	32.127	1.5365 1.5314 1.5264	24819.	4.5106	1424.9	420950	3.4797	28.96
15300	15289	32.127	1.5314	24800. 24781.	4.4959	1424.4 1423.8 1423.3 1422.7	4.0800 :	3.4911	28-964
15400	15364	32.127	1.5264	24781.	4.4812	1423-8	4.0652	3.5025	28-964 28-964
15500 15600	15588	32.126 32.126 32.126	1.5214 1.5165 1.5115 1.5065	24762. 24743. 24725. 24706.	4.4520	1423.3	4.0504 4.0356	3.5140 3.5255 3.5371	28.964
15700	15688	32.126	1.5115	24725.	4.4375	1422.2	4.0208	3.5371	28.964
15800	15788	32.125	7-5065	24706.	4.4230	1421.7	4.0061	3.5487	28-964
15900	15888	32.125	1.5016	24687.	4.4085	1421.1	3.9915	3.5603	28.964
16000 16100	15988 16088	32.125 32.124	1.4947 + 0.	24668. 24649.	4.3940 +23 4.3796	1420.6 1420.0 1419.5	3.9769 + 9 3.9623	3.5720 - 7 3.5838	28-964
16200	16187	32.124	1.4868	24631.	4.3653	1410.5	3.9478	3.5756	28.964
16300	16287	32.124 32.124	1.4819	24612.	4.3509	1418.9	3.9333	3.6074	28-964
16400	16387	32.124	1.4770	24593.	4.3366	1418.4	3.9189	3.6193	28.964
16500	16487	32.123 32.123	1.4722	24574.	4.3224	1417.8	3.9045	3.6313	28-964
16600	16587	32.423	1:4673	24555.	4.3081	1417.3	3.8901	3,6432	28.964
16700	16687	32.123	1.4625	24537.	4.2940	1416.7	3.8759	3.6553	28-964
16800	16786 16886	32.122 32.122	1.4576 1.4528	24518. 24499.	4.2798 4.2657	1416.2	3.8615 3.8473	3.6674 3.6795	28.964
17000	16986	32.122	1.4480 + 0	24480.	4.2516 +23	1415-1	: ' 3.0331 + 9	3.6917 - 7	28.964
17100	17086	32.122 32.121	1.4432	24462.	4.2376	1414.5	3.8331 + 9 3.8190	3.7039	28-964
17200	17186	32.121	1.4384	24443.	4.2236	1414.0 1413.4	3.8049	3.7162	28.964
17300	17286	32.121	1-4336	24424.	4.2096	1413.4	3-7908	3.7286	28.964
17400	17385	32.130 32.120	1-4289	24405.	4.1956	1412.9	3.7768	3.7409	28.96
17500 17600	17485 17585	32.120	1.4241	24386.	4.1817 1.1470	1412.3	3.7628 3.7488	3.7534	28.964
17700	17685	32.120 32.120	1.4147	24368. 24349.	4.1679 4.1540	1411.2	3.7349	3.7784	28.964
17800	17785	32.119	1-4100	24330	4.1402	1410.7	3.7211	3.7910	28.964
17900:	17885	32.119	1.4053	24311.	1.1265	1412.9 1412.3 1411.8 1411.2 1410.7 1810.1	3.7211 3.7073	3.8036	28.964
8000	17984 18084	32.119	1-4006 + 0	24292.	4.1128 +23	1409.6	3.6935 + 9 3.6798	3.8163 - 7	28-964
18100	18084	32.118	1.3959	24274.	4.0991	1409.0	3.0/98	3.8291 3.8419	28.964
18200 18300	18184	32.118	1.3912	24255.	4.0854 4.0718	1407:9	3.6661 3.6524	3.8547	28.964
18400	18284 18384	32.118 32.117	1.3866 1.3819	24236. 24217.	4.0582	1407.3	3.6388	3.8676	28.964
18500	18484	32.117	1.37.7.3	24198.	4.0446	1406.8	3.6252	3.8806	28.964
18600	18583	32.117	1.3727	24180.	4.0311	1406.2	3.6117	3.8936	28.964
18700	18683	32.116	1.3681	24161.	4.0176	1405.7	3.5982	3.9067	28 - 964
18800	18783 18833	32.116 32.116	1.3635 1.3589	24142. 24123.	4.0042 3.9908	1405.1	3.5847 3.5713	3.9198 3.9330	28.964
19000	18983	32.115	1.3544 + 0-	24104.	3.9774 +23	1404.0	3.5579 + 9	3.9462 - 7	28.964
19100	19083	32.115	1.3498	24086.	3.9641	1403.5	3.5446	3.9595	28.964
19200	19182	32.115	1.3453	24067.	3.9508	1402.9	- 3.5313	3.9728	28.964
19300 [19282	32.115	1.3407	24048.	3.9375	1402.4	3.5180	3.9862	28.964
19400	19382	32.114	1.3362	24029.	3.9242	1401.8	3.5048	3.9997	28.964
19500	19482	32.114	1-3317	24010.	3.9110	1401-3	3-4916	4.0132	28.96
19600	19582	32.114 32.113	1.3272 1.3227	23992. 23973.	3.8979 3.8847	1400.7	3-4785 3-4654	4.0267	28.96
19700	19681	32.113	1.3227	23954.	3.8716	1399.6	3.4523	4.0540	28.96
19800. 19900.	1978-1 1988 1	32.113	1.3138	23935.	3.8585	1399.0	3.4393	4.0678	28.96
20000	19981	32.112	1.3093 + 0	23916.	3.8455 +23	1398.5	3.4263 + 9	4.0816 - 7	28.964
20100	20081	32.112	1.3049	23898.	3.8325	1397.9 1397.4	3-4134	4-0954	28.96
20200	20180 20280	32.112	1.3004	23879. 23860.	3.8195 3.8066	1397.4	3.4005	4.1093 4.1233	28.96
20300	20280	32.111	1:2014	23841.	3.7937	1396.B 1396.2	3.3876 3.3748	4.1233	28.96
20500	20480	32.111	1.2872	07600	3.7808	1395.7	3.3620	4.1514	28.96
20600	20580	32.111	1.2828	23804.	3.7680	1395.1	3.3492	4.1655	28.96
20700]	20580 20679	32.111 32.111 32.111 32.111 32.111	1.2785	23785.	3.7552	1394.6	3.3365	4.1797	28.96
0800	20779 20879	32.110 32.110	1.2960 1:2916 1.2872 1.2828 1.2785 1.2741	23804. 23785. 23766. 23747.	3.7424 3.7297	1395.7 1395.1 1394.6 1394.0 1393.5	3.3239 3.3112	4.1940	28.96
1000	20979	32.109	1.2654 + 0	23728	3.7.170. +23	1392.9	3.2986 + 9	4.2227 - 7	28.96
21100	21079	32.109	1.2611	23710.	3.7043	1392.3	3.2861	4.2371	28.96
21200	21178	32.109	1.2568	23691.	3.6917	1391.8	3.2735 3.2611	4.2516	28.96
21300 21400	21278 21378	32.108 32.108	1.2525 1.2482	23672. 23653.	3.6791 3.6665	1391.2	3.2486	4.2808	28.964
21500	21478	32.108	1.2439	23634.	3.6540	1390.1	3.2362	4.2955	28.96
21600	21578	32.107	1.2397	23616.	3.6415	1389.5	3.2238	4.3102	28.964
2.1700]	21677	32.107	1.2354	23597.	3.6290	1389.0	3.2115	4.3250	28.964
21800 21900	21777 21877	32.107 32.107	1.2312	23578. 23559.	3.6166 3.6042	1388.4	3.1992 3.1869	4.3399 4.3549	28.964
22000	21977	32-106	1.2227 + 0	23540.	3.5918 +23	1387.3	3.1747 + 9	4.3699 - 7	28.964
22100	22077	32.106	1.2185	23522.	3.5795	1386.7	3.1625	4.3849	28.964
22200	22176	32.106	1.2143	23503.	3.5672	1386.2	3.1504	4.4000	28.964
22300	22276	32.105	1.2101	23484.	3.5549	1385.6	3.1383	4.4152	28.964
22400	22376	32.105	1.2059	23465.	3-5426	1385.1	3.1262	4.4305	28.964
22500	22476	32.105	1,2018	23446.	3.5304	1384.5	3.1142	4.4458	28.964
22600	22576	32.104	1.1976	23428.	3.5183	1383.9	3.1022	4.4612	28.964
22700	22675	32.104	1.1934	23409.	3.5061	1383-4	3.0902	4.4767	28.964
22800	22775	32.104	1.1893 1.1852	23390. 23371.	3.4940 3.4819	1382.8	3.0783 3.0664	4.4922 4.5075	28.964
2900	22875	32.104							

TABLE X.—Continued

GEOPOTENTIAL ALTITUDE, ENGLISH UNITS~

Altit	ude	Accel. due to	Specific weight	Pressure scale	density	speed	frequency	Mean free path	Molecula weight
H, ft	Ž, ff	gravity g, ft sec ⁻²	weight ω, lb ft ⁻² sec ⁻²	H _P , ft	n, ft ²³	∇, ft sec⁻¹	$ u$, sec $ \overline{} $	Ŀ, ft	M
23000 23100 23100 23300 23500 23500 23600 23700 23900	23025 23126 23326 23326 23426 23527 23627 23727 23827 23927	32.103 32.103 32.102 32.102 32.102 32.102 32.101 32.101 32.101 32.101	1 = 1800 + 0 1.1750 1.1718 1.1677 1.1637 1.1596 1.1556 1.1515 1.1475	23348. 23329. 23310. 23291. 23272. 23253. 23235. 23216. 23178.	3.4668 +23 3.4548 3.4428 3.4308 3.4189 3.4070 3.3951 3.3833 3.3714 3.3597	1381.5 1381.0 1380.4 1380.4 1379.9 1379.3 1378.7 1378.2 1377.6 1377.6	3.0515 + 9 3.0397 3.0279 3.0161 3.0044 2.9927 2.9811 2.9694 2.9579 2.9463	4.5274 - 7 4.5432 4.5590 4.5749 4.5909 4.6069 4.6230 4.6392 4.6555 4.6718	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
24000 24100 24200 24300 24500 24500 24600 24700 24800 24900	24028 24128 24228 24320 24429 24529 24629 24729 24830 24930	32.100 32.100 32.099 32.099 32.099 32.098 32.098 32.098 32.098 32.098	1.1395 + 0 1.1355 1.1515 1.1275 1.1275 1.1196 1.1196 1.1117 1.1078	23159. 23140. 23122. 23103. 23008. 23046. 23046. 23027. 23008. 22990.	3.3479 +23 3.3362 3.3245 3.3129	1375.9 1375.3 1374.8 1374.2 1373.6 1373.1 1372.5 1371.9 1371.4 1370.8	2.9348 + 9 2.9233 2.9119 2.9005 2.8891 2.8665 2.8552 2.8552 2.8328	4.6882 - 7 4.7047 4.7212 5.7378 - 4.7378 4.7345 4.7712 4.7881 4.8050 4.8219 4.8390	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
25000 25100 25200 25300 25400 25500 25600 25700 25800 25900	25030 25130 25230 25331 25431 25531 25631 25732 25832 25932	32.097 32.097 32.096 32.096 32.096 32.095 32.095 32.095 32.094 32.094	1.0999 + 0 1.0961 1.0922 1.0883 1.0884 1.0806 1.0768 1.0729 1.0691 1.0653	22971. 22952. 22933. 22914. 22895. 22876. 22858. 22839. 22820. 22801.	3.2321 +23 3.2207 3.2094 3.1980 3.1867 3.1754 3.1642 3.1530 3.1418 3.1306	1370.2 1369.6 1369.1 1368.5 1357.9 1367.4 1366.8 1366.2 1365.7	2.8216 + 9 2.8105 2.7994 2.77884 2.7773 2.7664 2.7554 2.7745 2.7745 2.7736 2.7728	4.8561 - 7 4.8733 4.8996 4.9079 4.9253 4.9428 4.9664 4.9781 4.9958 5.0136	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
26000 26100 26200 26300 26400 26600 26700 26800 26900	26032 26133 26233 26333 26433 26534 26634 26734 26834 26935	32.094 32.094 32.093 32.093 32.093 32.092 32.092 32.092 32.091 32.091	1.0615 + 0 1.0577 1.0539 1.0502 1.0502 1.0464 1.0427 1.0389 1.0352 1.0315 1.0278	22782. 22763. 22744. 22726. 22707. 22688. 22667. 22651. 22631. 22612.	3.1195 +23 3.1084 3.0973 3.0863 3.0753 3.0643 3.0533 3.0424 3.0315 3.0207	1364.5 1363.9 1363.4 1362.8 1362.2 1361.7 1361.1 1360.5 1359.9	2.7119 + 9 2.7012 2.6797 2.6690 2.6584 2.6478 2.6372 2.6366 2.6161	5.0315 ~ 7 5.0895 5.0875 5.0856 5.1039 5.1221 5.1405 5.1590 5.1775 5.1961	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
27000 27100 27200 27300 27400 27500 27600 27600 27800 27900	27035 27135 27236 27336 27436 27536 27536 27637 27737 27837 27937	32.091 32.090 32.090 32.090 32.090 32.089 32.089 32.089 32.088	1.0241 + 0 1.0204 1.0167 1.0131 1.0094 1.0058 1.0021 9.9851 - 1 9.9490 9.9130	22594. 22575. 22556. 22537. 22518. 22499. 22480. 22462. 22443. 22424.	3.0098 +23 2.9990 2.9883 2.9775 2.9668 2.9561 2.9455 2.9348 2.9243 2.9137	1358.8 1358.2 1357.6 1357.1 1356.5 1355.9 1355.3 1358.8 1358.8	2.6056 + 9 2.5952 2.5958 2.5744 2.5641 2.5543 2.5533 2.5533 2.5330 2.5128	5.2148 - 7 5.2336 5.2524 5.2714 5.2904 5.3095 5.3287 5.3480 5.3869	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
28000 28100 28200 28300 28500 28500 28600 28700 28800 28900	280 38 281 38 282 38 283 38 284 39 285 39 286 39 28 4 0 288 4 0 288 4 0	32.088 32.087 32.087 32.087 32.086 32.086 32.086 32.086 32.085	9.8770 - 1 9.8412: 9.8054 9.7698 9.7343 9.6988 9.6635: 9.6282 9.5931 9.5581	22405. 22336. 22348. 22330. 22311. 22292. 22273. 22254. 22235.	2.9032 +23 2.8927 2.8822 2.8717 2.8613 2.8509 2.8406 2.8302 2.8199 2.8096	1353.0 1352.5 1351.9 1351.3 1350.7 1350.2 1349.6 1349.0 1348.4	2.5027 + 9 2.4925 2.4825 2.4724 2.5624 2.4524 2.4324 2.4325 2.4326 2.4128	5.4064 - 7 5.4260 5.4458 5.4656 5.4855 5.5055 5.5256 5.5457 5.5660 5.5863	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
29000 29100 29200 29300 29400 29500 29600 29700 29800 29900	29040 29141 29241 29341 29342 29542 29542 29642 29743 29943	32.085 32.084 32.084 32.084 32.083 32.083 32.083 32.082 32.082 32.082	9.5231 - 1 9.4883 9.4535 9.4189 9.3843 9.3498 9.3155 9.2812 9.2470 9.2130	22216. 22198. 22179. 22160. 22141. 22122. 22103. 22084. 22065. 22047.	2.7994 +23 2.7892 2.7790 2.7688 2.7587 2.7486 2.7385 2.7285 2.7185 2.7085	1347.3 1346.7 1346.1 1345.5 1345.0 1344.4 1343.8 1343.2 1342.6 1342.1	2.4029 + 9 2.3931 2.3634 2.3736 2.3639 2.3543 2.3543 2.3446 2.3350 2.3254 2.3159	5.6068 - 7 5.6273 5.6480 5.6687 5.6895 5.7104 5.7314 5.7525 5.7737 5.7750	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
30000 30100 30200 30300 30400 30500 30600 30700 30800 30900	30043 30144 30244 30344 30545 30645 30745 30946	32.082 32.081 32.081 32.081 32.080 32.080 32.080 32.079 32.079 32.079	9-1790 - 1 9-1451 9-1113 9-0777 9-0441 9-0106 8-9772 8-9439 8-9106 8-8775	22028. 22009. 21990. 21971. 21952. 21933. 21914. 21876. 21877. 21858.	2.6985 +23 2.6886 2.6787 2.6688 2.6589 2.6491 2.6393 2.6296 2.6198	1341.5 1340.9 1340.3 1339.7 1339.1 1338.6 1338.6 1336.6 1336.8	2.3064 + 9 2.2969 2.2874 2.2780 2.2780 2.2686 2.2592 2.2499 2.2406 2.2313 2.2221	5.8164 - 7 5.8379 5.8595 5.8612 5.9030 5.9249 5.9249 5.9469 5.9689	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE T.—Confinued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Åltit	ude	Accel. due to gravity	Specific weight ω _ε lb ft ⁻² sec ⁻²	Pressure scale height	density	Particle speed V, ft sec ⁻¹	Collision frequency ν , sec-	Mean free path L, ft	Molecular weight M
Z, ft	H, ft	g, ft sec-2	M ³ (n 11 sec _	H _F , ft	11, 11	V, II SEC	ν, sec	∟, [[W
23000 23100 23200 23300 23400 23500 23600 23700 23800 23900	229.75. 23074 23174 23374 23374 23474. 23573 23673 23673	32.103 32.103 32.103 32.102 32.102 32.101 32.101 32.101 32.101	1.1811 + 0. 1.1770- 1.1729 1.1688- 1.1647 1.1607 1.1566 1.1566 1.1486	23352. 23334. 23315. 23296. 23277. 23258. 23240. 23221. 23202. 23183.	3.4699 +23 3.4579 3.4459 3.4459 3.4220 3.4101 3.3983 3.3864 3.3746 3.3629	1381.7 1381.1 1380.6 1380.0 1379.4 1376.9 1377.7 1377.2 1377.6	3.0545 + 9 3.0427 3.0309 3.0192 3.0075 2.9988 2.9842 2.9726 2.9610 2.9495	4.5234 - 7 4.5391 4.5549 4.5708 4.5867 4.6027 4.6187 4.6349 4.6511 4.6673	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
24000 24100 24200 24300 24500 24500 24600 24700 24800 24900	23972. 24072 24172 24272 24371 24471 24571 24671 24771 24870	32.100 32.100 32.100 32.099 32.099 32.099 32.098 32.098 32.098	1 - 1406 + 0 1 - 1356 1 - 1326 1 - 1286 1 - 1287 1 - 1207 1 - 1168 1 - 1128 1 - 1089 1 - 1050	23164. 23146. 23127. 23108. 23089. 23070. 23052. 23033. 23014. 22995.	3.3512 +23 3.3395 3.3278 3.3161 3.30%5 3.2930 3.2814 3.2699 3.2584 3.2470	1376.0 1375.5 1374.9 1374.4 1373.8 1373.2 1372.7 1372.1 1371.5 1371.0	2.9380. + 9 2.9265 2.9151 2.9037 2.8924 2.8810 2.8698 2.8585 2.8473 2.8361	4.6837 = 7 4.7001 4.7105 4.7331 4.7497 4.7664 4.7832 4.8000 4.8169 4.8339	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
25000 25100 25200 25300 25400 25500 25600 25700 25800 25900	24970. 25070 25170 25269 25369 25369 25568 25768 25868	32.097 32.096 32.096 32.096 32.096 32.095 32.095 32.095 32.095	1.1011 + 0 1.0972 1.0934 1.0995 1.0856 1.0818 1.0780 1.0741 1.0703	22976. 22958. 22939. 22920. 22901. 22882. 22845. 22846. 22807.	3.2356 +23 3.2242 3.2128 3.2015 3.1902 3.7789 3.1677 3.1565 3.1453 3.1342	1370.4 1369.8 1369.3 1368.7 1368.1 1367.5 1367.0 1366.4 1365.8	2.8250 + 9 2.8137 2.8028 2.7918 2.7808 2.7698 2.7588 2.7588 2.7479 2.7371 2.7262	4.8510 - 7 4.8681 4.8853 4.9026 4.9200 4.9374 4.9725 4.9725 5.0079	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
26000 26100 26200 26300 26800 26600 26600 26800 26800 26800	25968 26067 26167 26267 26367 26466 26566 26766 26865	32.094 32.093 32.093 32.093 32.092 32.092 32.092 32.092 32.092 32.092	1.0627 + 0 1.0589 1.0552 1.0514 1.0477 1.0439 1.0402 1.0365 1.0328	22788. 22769. 22751. 22732. 22713. 22694. 22675. 22638. 22619.	3.1231 +23 3.1120 3.1009 3.0899 3.0789 3.0789 3.0570 3.0570 3.0570 3.0353 3.0244	1364-7 1363-6 1363-0 1362-4 1361-9 1361-3 1360-7 1360-1 1359-6	2.7154 + 9 2.7047 2.6939 2.6832 2.6726 2.6620 2.6514 2.6408 2.6303 2.6196	5.0257 - 7 5.0436 5.0616 5.0796 5.0798 5.1160 5.1343 5.1526 5.1711 5.1896	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
27000 27100 27200 27300 27500 27500 27600 27700 27800 27900	26965 27065 27165 27264 27364 27464 27564 27663 27763 277863	32.091 32.090 32.090 32.090 32.090 32.089 32.089 32.088 32.088	1.0254 + 0 1.0217 1.0180 1.0144 1.0107 1.0071 1.0035 9.9984 - 1 9.9624 9.9264	22600. 22581. 22563. 22544. 22525. 22506. 22487. 22469. 22450.	3.0136 +23 3.0028 2.9921 2.9813 2.9707 2.9600 2.9494 2.9387 2.9282 2.9176	1359.0 1358.4 1357.8 1357.3 1356.7 1355.6 1355.6 1355.0 1354.4	2.6093 + 9 2.5989 2.5885 2.5781 2.5578 2.5575 2.5472 2.5370 2.5268 2.5166	5.2083 - 7 5.2270 5.2457 5.2646 5.2836 5.3026 5.3217 5.3409 5.3602 5.3796	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
280G0 28100 28200 28300 26400 28500 28700 28700 28800 28900	27962 28062 28162 28262 28361 28461 28561 28661 28760 28860	32.088 32.088 32.087 32.087 32.087 32.086 32.086 32.086 32.085	9.8905 - 1 9.8547 9.8190 9.7835 9.7480 9.7126 9.6173 9.6421 9.6071 9.5721	22412. 22393. 22374. 22356. 22357. 22318. 22290. 22280. 22262. 22243.	2.9071 +23 2.8966 2.8862 2.8757 2.8553 2.8550 2.8446 2.8343 2.8240 2.8138	1353.3. 1352.7 1352.1 1351.5 1351.0 1350.4 1349.8 1349.2 1348.7	2.5065 + 9 2.4964 2.4863 2.4763 2.4663 2.4663 2.4663 2.4864 2.4364 2.4365 2.4167	5.3991 - 7 5.4186 5.4382 5.4580 5.4778 5.4977 5.5177 5.5378 5.5579	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
29000 29100 29200 29300 29500 29500 29700 29800 29800	28960 29059 29159 29259 29359 29458 29558 29558 29757 29857	32.085 32.084 32.084 32.084 32.083 32.083 32.083 32.083 32.082	9.5372 - 1 9.5024 9.4677 9.4331 9.3986 9.3642 9.3299 9.2957 9.2616 9.2276	22224. 22205. 22186. 22188. 22149. 22130. 22111. 22092. 22073. 22055.	2.8035 +23 2.7933 2.7832 2.7730 2.7629 2.7528 2.7427 2.7327 2.7327 2.7327	1347-5 1346-9 1346-8 1345-8 1345-6 1344-6 1344-0 1343-5 1342-9 1342-3	2.4069 + 9 2.3971 2.3873 2.3776 2.3679 2.3583 2.3487 2.3391 2.3295 2.5200	5.5985 - 7 5.6190 5.6395 5.6602 5.6809 5.7017 5.7226 5.7436 5.7436 5.7647 5.7859	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
30000 30100 30200 30300 30400 30500 30600 30700 30800 30900	29957 30057 30156 30256 30356 30455 30455 30655 30755 30854	32.082 32.081 32.081 32.080 32.080 32.080 32.080 32.080 32.080	9.1936 - 1 9.1598 9.1261 9.0924 9.0589 9.0255 8.9921 8.9589 8.9257 8.9257	22036. 22017. 21998. 21979. 21961. 21942. 21923. 21904. 21885. 21866.	2.7028 +23 2.6929 2.6830 2.6731 2.6633 2.6533 2.6533 2.6337 2.6340 2.6242 2.6145	1341.7 1340.6 1340.6 1340.6 1339.4 1338.8 1338.2 1337.7 1337.1	2.3105 + 9 2.3010 2.2915 2.2821 2.2727 2.2634 2.2541 2.2448 2.2355 2.2263	5.8072 - 7 5.8286 5.8501 5.8716 5.8733 5.9151 5.9370 5.9590 5.9610 6.0032	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE X.-Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

			GEOPOTEN		,				
Altif	lude	Accel.	Specific	Pressure scale	Number	Particle	Collision	Mean free	Moleculo
·		due to	فطستميثين		density	speed	frequency	path	weight
H, ft	Z, ft	gravity	(1 1h ft-2 sec-2	neight	'n, ft"	∇, ft sec	ν , sec ⁻¹		
1-19 1-1	اق الموسكة . ا	g, fi: sec-2	ω, lb ft ⁻² sec ⁻²	H _P , ft	'' , ''	V, II Sec	ν, sec	L, ft	M
71000	71014			01070					
31000 31100	31046	32.078	8-8445 - 1 8-8116	21839. 21820.	2.6004 +23	1335.7	2.2129 + 9	6.0358 - 7 6.0583	28.964
31100 31200	31146 31247	32.078 32.078	8.8116 6.7787	21801.	2.5811	1335.1 1334.5	2.2037 2.1945	6.0809	28.964
31300	31447	32.078	3.7460	21782.	2.5715	1333.9 1333.3	2.1854	6.1036	28.964
31400	31447	32.077	8.7133 8.6808	21763.	2.5620	1333.3	2.1763 2.1673	6-1264	28.964
31500 31300	31447 31548 31648	32.077 32.077	8.6463	21745. 21726.	2.5524 2.5429	1332.7 1332.1	2.1673 2.1582	6.1494	28.964 28.964
31700.	31748	32.076	8.6160	217.07	2.5334	1531.6	2.1492	6.1955	28.964
31800	31849	32.076	3:5837	21688.	2.5239	1331.0	2.1403	6.2187	28.964
31900	31949	32.076	8.5515	21669.	2.5145	1330.4	2.1313	6.2421	28.964
32000	32049	32.075	8-5194 1	21650.	2.5051 +23	1329.8 1329.2 1328.6	2-1224 + 9	6-2655 - 7	28.964
32100 32200	32149	32.075 32.075	8.4874 8.4555	21631. 21612.	-2.4957 2.4863	1320.2	2.1135 2.1047	5.2891	28.964
32300	32250 32350	32.074	8.4237	~ 21594.	2.4770	1328.0	2.0958	6.3128 6.3365	28.964 28.964
32400	32450	22.07h	8.3920	21575.	2.4677	1327.5	2-0871	6.3604	28.964
32500	32551	32.074 32.074 32.073 32.073	8.360k	21556	2.4584	1320.9	2.0783 2.0696	6.3844	28.964
. 32600	32651	32.074	8.3288 8.2974	21537.	2.4492	1326.3	2.0696	6.4085	28.964
32700 32800	32751 32852	32.073	8.2974	21518. 21499.	2.4399 2.4308	1325.7 1325.1	2.0608 2.0522	6.4328	28.964
32900	32952	32.073	8.2347	21480.	2.4216	1324.5	2.0435	6.4816	28.964
33000	33052	32.072	8.2036 - 1	21461.	2.4124 +23	1323.9	2.0349 + 9	6.5061 - 7	28.964
33100	33153 33253 33353	32.072 32.072 32.072 32.071	8.2036 - 1 8.1725 8.1415 8.1106	21443. 21424.	2.4033	1323.3	2.0263	6.5308	28.964
33200 33300	33253	32.072	8-1415	21424.	2.3942	1322.8	2.0177	6.5556	28.964
33400	33353 33454	32.071	8.1106 8.0798	21405. 21386.	2.3852	1322.2	2.0092 2.0007	6.5805	28.964 28.964
33500	33554	32.071	8.0491	21367.	2.3671	1321.0	1.9922	6.6307	28.964
33600	33654	32.071 32.071 32.070 32.070	8:0184	21348.	2.3581	1320.4	1.9838	6.6560	28.964
33700	33755	32.070	7.9879	21329.	2.3492	1319.8	1.9753	6.6814	28.964
33600 33900	33855 33955	32.070 32.070	7.9574 7.9271	21310. 21292.	2.3402 2.3313	1319.2	1.9670	6.7069	28.964 28.964
34000	34056	32.069	7.8968 - 1	21273.	2.3224 +23	1318.0	1.9503 + 9	6.7583 - 7	28.964
34100	34156	32.069	7.8666	2125%.	2.3136	1317.4	1.9419	6.7841	28.964
34200	34256	32.069	7.8365	21235. 21216.	2.3048	1316.8 1316.3	1.9337	6.8101	28.964
34300	34357	32.068	7.8065	21216.	2.2960	1316.3	1.9254	6.8362	28.964 28.964
34400. 34500	34457 34557	32.068 32.068	7.7766	21197. 21178.	2.2872 2.2784	1315.7	1.9172	6.8625	28.964
34600	34658	32.067	7.7467 7.7170	21159.	2.2697	1315.1 1314.5	1.9090	6.8888	28.964 28.964
34700	34758	32.067	7.6873 7.6577	21140.	2.2610	1313.9	1.8927 1.8846	6.9419	28.964
34800 34900	34858 34959	32.067 32.066	7.6577 7.6283	21122. 21103.	2.2523 2.2437	1313.3	1.8846 1.8765	6.9419 6.9687 6.9956	28.964 28.964
i		1				l i			
35000 35200	35059 35260	32.066 32.066	7.5989 - 1 7.5403	21084. 21046.	2.2350 +23 2.2179	1312.1 1310.9	1.8684 + 9 1.8524	7.0225 - 7 7.0769	28.964
35400	35460	32.065	7-4821	21008.	2.2008	1309.7	1.8364	7.1318	28.964 28.964
35400	35661	32.064	7_4243	20070	2.2008 2.1838	1309.7 1308.5	1.8206	7.1873	28.964
35800	35862	32.064	7.3668 7.3096 7.2455	20933. 20895. 20878.	2.1669	1307.3	1.8049	7.2432 7.2997	28.964
36000 36200	36062 36263	32.063 32.062	7.3096	20895.	2.1502 2.1313	1306.1	1.7893	7.2997	28.964
36400	36464	32.062	7.1760	20879.	2.1110	1305.6	1.7729	7.3642 7.4353	28.964 28.964
36600	36664	32.061 32.061	7.1072 7.0391	20879. 20879.	2.0908	1305.6 1305.6	1.7560 1.7392 1.7225	7.5072	28.964
36800	.36865	32.061	7.0391	20879.	2.0708	1305.6	1.7225	7.5797	28.964
37000 37200	37066	32.060	6-9716 - 1	20880.	2.0509 +23	1305.6	1.7060 + 9	7.6529 - 7	28.964
37400	37266 37467	32.059 32.059	6.9048 6.8386	20880.	2.0313 2.0119	1305.6	1.6897	7.7268 7.8014	28.964 28.964
3,7600	37668	32.058	67731 l	20881.	1.9926	1305.6	1.6575	7.8768~	28.964
37800	37668 37869 38069	32.058	6.7081	20881.	1.9736	1305.6	1.6417	7.9529	28.964
38000	38059	32.057	6.7081 6.6438 6.5801	20882.	1.9547	1305.6	1.6260	7.87687 7.9529 8.0297 8.1073	28.964
38200 38400	38270 38471	32.056 32.056	6.5801	20882. 20883.	1.9360 1.9175	1305.6	1.6104	8.1073 8.1856	28.964 28.964
38600	38672	32.055	6.4546	20883.	1.8991	1305.6	1.5798	8.2646	28.964
38800	38872	32.054	6.3927	20883.	1.8810	1305.6	1.5647	8.3445	28.964
39000	39073	32.054	6.3315 - 1	20884.	1.8630 +23	1305.6	1.5497 + 9	8.4251 - 7	28.964
39200	39274	32.053	6.2708	20884.	1.8452	1305.6	1-5349	8-5064	28.964
39400 39600	39475 39675	32.053 32.052	6.2107	20885. 20885.	1.8275 1.8100	1305.6	1.5202	8.5886	28.964
39800	39876	32.052	6.0922	20885.	1.7927	1305.6	1.4912	8.6716 8.7553	28.964 28.964
40000	40077	32.051	6-0338	20886.	1.7756	1305.6	1.4770	8.8399	28.964
40200	40278	32.050	5-9759	20886.	1.7586	1305.6	1.4628	8.9253	28.964
10100	40478	32.050	5.9186	20887.	1.7417	1305.6	1.4488	9.0115	28.964
40600 40800	40679 40880	32.049 32.048	5.8619 5.8057	20887. 20887.	1.7251 1.7086	1305.6	1.4350	9.0985 9.1864	28.964 28:964
41000	41081	32.048	5.7501 - 1	20888.	1.6922 +23	1305.6	1.4077 + 9	9.2751 - 7	28.964
41200	41282	32.047	5.6949	20888.	1.6760	1305.6	1.3942	9.3647	28.964
41400	51482	32.046	5.6404	20889.	1.6600	1305.6	1.3808	9.4552	28.964
41600	41683	32.046	5.5863	20889.	1-6441	1305.6	1.3676	9.5465	28.964
11800	41884	32.045	5.5327	20889.	1.6284	1305.6	1.3546	9.6387	28.964
42000 42200	42085 42286	32.045 32.044	5.4797	20890.	1.6128	1305.6	1.3416	9.7318 9.8258	28.964 28.964
42400	42486	32.043	5.3752	20891.	1.5821	1305.6	1.3160	9.9207	28.964
42600	42687 42888	32.043	5.3236	20891.	1.5670	1305.6	1.3035	1.0017 ~ 6	28-964
42800		32.042	5.2726	20891.	1.5520	1305.6	1.2910	1.0113	28.964

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		Accel.		Pressure					
Altit	ude	due to	Specific	scale	Number	Particle	Collision		Molecula
			weight		density	speed	frequency	path	weight
Z, ft	H, ft	gruvity	ω. lb ft ⁻² sec ⁻²	incigin	n, it -8	∇, ft sec '	ν, sec'	Li, ft	M
- , ''	119 11	g,ft sec-	ω, lb ft ⁻² sec ⁻²	H _e , ft		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-, ''	. "
31000	30054	32.079	8.8597 - 1	21848.	2.5049 +23	1335.9	2.2171 + 9	6.0255 - 7	20.041
31100	30954 31054	32.078	8.8268	21829.	2.5952	1335.3	2.2079	6.0479	28.964
31200	31153	32.078	8.7940	21829. 21810.	2.5856	1334.8	2.1988	6.0479	28.964
31300	31253	32.078	8.7613:	21791.	2.5760	1334.2	2.1897	6.0930	28.964
31400	31353	32.077 32.077	8.7288	21772.	2.5665	1333.6	2.1806	6-1157	28,964
31500	31452	32.077	8.6962 8.6638	21754.	2.5569	1333.0	2.1716	6.1385	28.964
31600 31700	31552	32.077 32.076	8.0038	21735.	2.5474	1332-4	2.1626	6-1614	28.964
31800	31652 31752	32.076	8.6315 8.5993	21716. 21697.	2.5380 2.5285	1331.6 1331.3	2.1536 2.1446	6.1844	28.964
31900	31851	32.076	8.5672	21678.	2.5191	1330.7	2.1357	6.2307	28.964
32000	31951	32.076	8.5351 - 1	21660.	2.5097 +23	1330.1	2.1268: + 9	6.2540 - 7	28.964
32100	32051	32.075	8.5032	21641.	2.5003	1329.5	2.1179	6.2775	28.964
32200	32150	32.075	8.4713	21622.	2.4910	1328.9	2.1091	6.3010	28.964
32300	32250	32.075	8.4396	21603.	2.4817	1328.3	2.1003	6.3246	28.964
32400 32500	32350 32449	32.074 32.074	8.4079 8.3763	21584. 21565.	2.4724	1327.8 1327.2	2.0915	6.3484	28.964
32600	32549	32.074	8.3449	21547.	2.4539	1326.6	2.0827 2.0740	6.3723 6.3963	28.964
32700	32649	32.073	8.3135	21528.	2.4447	1326.0	2.0653	6.4204	28.964
32800	32748	32.073	8.2822	21509.	2.4355	1325.4	2.0566	6.4446	28.964
32900	32848	32.073	8.2509	21490.	2.4263	1326.0 1325.4 1324.8	2.0480	6.4689	28.964
33000	32948	32.072	8-2198 - 1	25471.	2.4172 +23	1324.2 1323.6 1323.1 1322.5	2.0394 + 9	6.4933 - 7	28.964
33100	33048	32.072	8.1888	21452.	2.4081	1323.6	2.0308	6.5179 6.5425	28.964
33200 33300	33147	32.072	8-1578	21534.	2.3990	1323.1	2.0223	6.5425	28.964
33400	33247 33347	32.072 32.071	8.1270 8.0962	21415.	2.3900	1322.5	2.0137 2.0052	6.5673	28.964
33500	33446	32.071	8.0656	21377.	2.3809 2.3720	1321.3	1.9968	6.5922 A.A172	28.964
33600	33546	32.071	8.0350	21396. 21377. 21358.	2.3630	1321.9 1321.3 1320.7	1.9883	6.6172 6.6423 6.6676	28.964
33700	33646	32.070	8.0045	21340.	2.3540 2.3451	1320.1	1.9883	6.6676	28.964
33800	33745	32.070	7.9741	21321.	2.3451	1320.1 1319.5	1.9715	6.6929	28.964
33900	33845	32.070	7.9438	21302.	2.3362	1318.9	1.9632	6.7184	28.964
34000	33945 34044 34144	32.069	7.9135 - 1	21283.	2.3274 +23	1318.4	1.9549 + 9	5.7440 - 7	28.964
34100	34044	32.069	7.8834	21264.	2.3185	1317.8	1-9466	6-7697	28.964
34200 34300	34144	32.069	7.8533	21245.	2.3097	1317-2	1.9383	6.7955	28.964
34400	34244 34343	32.068 32.068	7.8234 7.7935	21227.	2.3009 2.2921	1316.6	1.9301 1.9218	6.8215 6.8476	28.964 28.964
34500	34443	32.068	7.7637	21189.	2.2834	1315.4	1.9137	6.8738	28.964
34600	34543	32.068	7.7340	21170. 21151.	2.2747	1314.8	1.9055	6.9001	28.964
34700	34642	32.067	7.7044	21151.	2.2660	1314.2	1.8974	6.9266	28.964
34800 34900	34742 34842	32.067 32.067	7.6749 7.6454	21133. 21114.	2.2573 2.2487	1313.6	1.8893 1.8812	6.9532 6.9799	28.964
J]			ļ	j ,		Î	J.
35000	34941	32.066	7.6161 - 1	21095.	2.2401 +23	1312.5	1.8731 + 9	7.0067 - 7	28.964
35200 35400	35141 35340	32.066 32.065	7.5576 7.4995	21057. 21020.	2.2229 2.2059	1311.3 1310.1	1.8571 1.8412	7.0607 7.1153	28.964
35600	35539	32.064	7.4418	20982.	2.1890	1308.9	1.8254	7 1704	28.964 28.964
35800	35739	32.064	7.3844	20944.	2.1721	1307.7	1.8097	7-2260	28.964
36000	35938	32.063	7.3273	20907.	2.1554	1306.5	1.7941	7.2821	28.964
36200	36137	32.063	7.2674	20878.	2.1378	1305.6	1.8097 1.7941 1.7783	7.3420	28.964
36400	36337 36536	32.062	7.1980	20879.	2.1174	1305.6	1.7613	7.4127	28.964
36600 36800	36536 36735	32.061 32.061	7.1292 7.0611	20879. 20879.	2.0972 2.0772	1305.6 1305.6	1.7445 1.7279	7.2260 7.2821 7.3420 7.4127 7.4841 7.5561	28.964
Į.		i	1	•	ļ				ļ
37000 37200	36934	32.060 32.060	6.9937 - 1 6.9269	20880.	2.057% +23 2.0378	1305.6	1.7114 + 9 1.6951	7-6288 - 7	28.964
37400	37134 37333,	32.059	6.8607	20880. 20881.	2.0378	1305.6 1305.6	1.6790	7.7022 7.7764	28.964 28.964
37600	37532	32.058	6.7952	20881.	1.9991	1305.6	1.6629	7.8512	28.964
37800	37732	32.058	6.7303	20881.	1.9801	1305.6	1.6471	7.9268	28.964
38000	37931	32.057	6.6660	20882.	1.9612	1305.6	1.6314	8.0031	28.964
38200	38130	32.056	6.6023	20882.	1.9425	1305.6	1.6158	8.0801	28.964
38400	38329	32.056	6.5393	20883.	1.9240	1305.6	1.6004	8-1578	28.964
38600 38800	38529 38728	32.055	6.4768	20883. 20883.	1.9057	1305.6	1.5852	8.2363 8.3156	28.964
,,,,,,		1] '33333]			1
39000 39200	38927 39126	32.054	6.3537 - 1 6.2930	20884. 20884.	1.8695 +23	1305.6	1.5551 + 9	8.3956 - 7 8.4764	28.964
39400	39326	32.053	6.2329	20885.	1.8340	1305.6	1.5256	8.5580	28.964
39600	39525	32.052	6.1734	20885.	1.8166	1305.6	1.5111	8.6403	28.964
39800	39724	32.052	6-1144	20885.	1.7992	1305.6	1.4967	8.7235	28,964
40000	39923	32.051	6.0561	20886.	1.7821	1305.6	1.4824	8.8074	28.964
¥0200	40123	32.050	5.9982	20886.	1.7651	1305-6	1.4683	8.8921	28.964
40400	40322	32.050	5.9409	20887.	1.7483	1305.6	1.4543	8-9777	28.964
40600 40800	40521 40720	32.049 32.049	5.8842 5.8280	20887. 20887.	1.7316 1.7151	1305.6 1305.6	1.4404	9.0641 9.1513	28.964
	•	32.048							ľ.
41000 41200	40920 41119	32.048	5.7724 - 1 5.7113	20888. 20888.	1.6988 +23	1305.6 1305.6	1.4131 + 9 1.3996	9.2393 - 7 9.3282	28.964
41400	41119	32.047	5.6627	20888.	1.6666	1305.6	1.3863	9.4180	28.964
41600	41517	32.046	5.6086	20889.	1.6507	1305.6	1.3731	9.5086	28.964
41800	41716	32.045	5.5551	20889.	1.6350	1305.6	1.3600	9.6001	28.964
	41916	32.045	5.5020	20890.	1.6194	1305.6	1.3471	9.6924	28.964
42000	42115	32.044	5.4495	20890.	1.6039	1305.6	1.3342	9.7856	28.964
42200		32.044	5.3975	20891.	1.5887	1305.6	1.3215	9.8798	28.964
42200 42400	42314							l' = : ≟ es e ~	
42200	42314 42513 42712	32.043 32.042	5.3459 5.2949	20891. 20891.	1.5735	1305.6 1305.6	1.3089 1.2964	9.9748 1.0071 - 6	28.964 28.964

TABLE ▼.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

** 1,5									
Alti	lude	Accel.	Specific weight	Pressure scale	Number density	Particle speed	Collision frequency	Mean free path	Molecular weight
H, ft	Z, ft	gravity g, ft sec ⁻²	ω, lb ft ⁻² sec ⁻²	height H _P , ft	n, ft ⁻³	∇, ft sec'		L, ft	M S
43000 43200 43400 43400 43600 44000 44000 44600 44800	43089 43290 43491 43691 43692 44093 44294 44496	32.041 32.041 32.040 32.040 32.039 32.038 32.038 32.037 32.037 32.037	5.222.1 - 1 5.1720 5.1224 5.0733 5.0247 4.9765 4.8816 4.8816 4.8348	20892. 20892. 20893. 20893. 20893. 20894. 20895. 20896.	1 -5371 +23 1 -5224 1 -5279 1 -4934 1 -4792 1 -4550 1 -4371 1 -4371 1 -4234 1 -4697	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	1.2786 + 9 1.2664 1.2543 1.2423 1.2304 1.2186 1.2070 1.1954 1.1840 1.1727	1.0211 - 6 1.0310 1.0409 1.0510 1.0611 1.0714 1.0817 1.0922 1.1027	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
#5000 #5200 #5400 #5600 #5600 #6200 #6200 #6400 #6600 #6800	45097 45298 45499 45700 45901 46102 46303 46503 46704 46905	32.035 32.035 32.034 32.033 32.033 32.032 32.032 32.031 32.030 32.030	4.7825 - 1 4.6971 4.6075 4.5633 4.5196 4.4762 4.4333 4.3908 4.3487	20896. 20897. 20897. 20898. 20898. 20898. 20899. 20899.	1.3963 +23 1.3829 1.3697 1.3566 1.3436 1.3307 1.3180 1.3054 1.2929	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	1-1615 + 9 1-1503 1-1393 1-1284 1-1176 1-1069 1-0964 1-0859 1-0755 1-0652	11241 - 6 11350 11459 11570 11682 11795 11909 12024 12140 1225.7	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
47000 47200 47400 47600 47800 48000 48400 48400 48400 48800	47106 47307 47508 47709 47910 48111 48312 48513 48714 48914	32.029 32.029 32.028 32.027 32.027 32.026 32.025 32.025 32.024 32.024	4.3070 - 1 4.2658 4.2249 4.1844 4.1045 4.1045 4.0052 4.0262 3.9876 3.9494	20900. 20900. 20901. 20901. 20902. 20902. 20903. 20903.	1.2683 +23 1.2562 1.2441 1.2322 1.2204 1.2008 1.1972 1.858 1.1744 1.1632	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	1.0550 + 9 1.0449 1.0349 1.0250 1.0152 1.0055 9.9587 + 8 9.8635 9.7691 9.6757	1.2375 - 6 1.2495 1.2616 1.2738 1.2861 1.2985 1.3110 1.3237 1.3365 1.3494	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
49000 49200 49400 49800 50000 50200 50400 50600 50800	49115 49316 49517 49718 49919 50120 50321 50522 50723 50924	32.023 32.022 32.022 32.021 32.021 32.020 32.019 32.019 32.018 32.017	3.9116 - 1 3.87%; 3.8369 3.8369 3.8001 3.7637 3.7276 3.6919 3.6565 3.6215 3.5868	20904. 20905. 20905. 20906. 20906. 20906. 20907. 20907.	1.1520 +23 1.1410 1.1301 1.1301 1.1086 1.0980 1.0875 1.0771 1.0068 1.0566	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	9-5831 + 8 9-4914 9-4006 9-3107 9-2216 9-1334 9-0460 8-9595 8-8738 8-7889	1.3624 - 6 1.3756 1.3889 1.4023 1.4158 1.4295 1.4453 1.4572 1.4713 1.4855	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
51000 51200 51400 51600 51800 52000 52200 52400 52400 52600	51125 51326 51527 51728 51929 52130 52331 52532 52733 52934	32.017 32.016 32.016 32.015 32.014 32.013 32.013 32.013 32.012 32.011	3.5524 - 1 3.5183 3.4846 3.4512 3.4181 3.3653 3.3529 3.3208 3.2889 3.2574	20908. 20908. 20909. 20990. 20910. 20910. 20911. 20911.	1.0465 +23 1.0364 1.0265 1.0167 1.0070 9.9735 +22 9.8781 9.7836 9.6900 9.5973	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	8.7048 + 8 8.6215 8.5390 8.4573 8.3764 8.2963 8.2169 8.1383 8.0605 7.9834	1.4999 - 6 1.5144 1.5290 1.5438 1.5537 1.5737 1.5889 1.6043 1.6198	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
53000 53200 53400 53600 53600 54000 54200 54600 54600 54800	53135 53336 53537 53738 53739 54140 54341 54542 54743 54944	32.011 32.010 32.009 32.009 32.008 32.008 32.007 32.006 32.006 32.005	3.2262 - 1 3.1952 3.1952 3.1343 3.1042 3.0745 3.0450 3.0158 2.9869 2.9583	20912. 20913. 20913. 20914. 20914. 20914. 20915. 20915.	9.5055 +22 9.4146 9.3245 9.2353 9.1469 9.0594 8.9728 8.8869 8.8019 8.7177	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	7.9070 + 8 7.8313 7.7564 7.6822 7.6087 7.5359 7.4638 7.3924 7.3217 7.2517	1.6512 6 1.6672 1.6833 1.6995 1.7159 1.725 1.7493 1.7662 1.7832	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
55000 55200 55400 55600 55800 56200 56400 56400 56800	55145 55347 55548 55749 55950 56151 56352 56553 56754 56955	32.005 32.004 32.003 32.003 32.002 32.001 32.001 32.000 31.999	2.9299 - 1 2.9018 2.8740 2.8465 2.8192 2.7922 2.7654 2.7389 2.7126 2.6866	20916. 20916. 20917. 20918. 20918. 20918. 20919. 20919.	8.6343 +22 8.5517 8.4699 8.3889 8.3086 8.2291 8.1504 7.9952 7.9187	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	7.1823 + 8 7.1136 7.0455 6.9781 6.9114 6.8453 6.7798 6.7149 6.6507 6.5870	1.8178 - 6 1.8354 1.8531 1.8710 1.8891 1.9073 1.9258 1.9444 1.9631	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
57000 57200 57400 57600 57800 58000 58200 58400 58600 58800	57156 57357 57558 57760 57961 58162 58363 58564 58765	31.998 31.998 31.997 31.997 31.996 31.995 31.995 31.993 31.993	2.6609 - 1 2.6354 2.6101 2.5851 2.5603 2.5358 2.5115 2.4874 2.4635 2.4399	20920. 20921. 20921. 20922. 20922. 20922. 20923. 20923. 20924.	7.8430 +22 7.7679 7.6936 7.6200 7.5471 7.4749 7.4034 7.3326 7.2624 7.1930	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	6.5240 + 8 6.4616 6.3998 6.3386 6.2779 6.2179 6.1584 6.0995 6.0411 5.9833	2.0012 - 6 2.0206 2.0401 2.0598 2.0797 2.0998 2.1201 2.1405 2.1612 2.1821	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE V.—Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS

Altí	tude	Accel. due to	Specific	Pressure scale	Number density	Particle speed	Collision frequency	Mean free path	Molecul weigh
Z, ft	H, ft	gravity a.ft sec ⁻²	ω, ib ft ⁻² sec ⁻²	height H _P , ft	n, ft ⁻³	∇, ft sec ⁻¹		L, ft	M
		1.7	5.2444 - 1		1.5437 +23				
43000 43200	42912 43111	32.042 32.041	5.1943	20892.	1.5290	1305.6 1305.6	1.2719	1.0265	28.96
43400	43310	32.041	1 5 1447 l	20893.	1: 5144	1305.6	1 2507	GAEA E	28.96
43600	43509	32.041	5 00E4	20893.	1.5144	1303.0	1.2597 1.2477	1:0504	28.96
¥3800		32.040 32.039	5.0730	20893.	1.4857	1305.0	1.2411	1 0546	20.70
44000	43708	32.039	5-0956 5-0470 4-9988 4-9511	20874.	1.4637	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	1.2358 1.2241 1.2124	1.0565 1.0566 1.0769	28.96
44000	43907	32.039	4.9988	20874.	1.4715	1305.0	1.2241	1.0500	28.96
44200	44107	32.038	4.9511	20894.	1.4575	1305.0	1.2124	1-0769	28.96
44400	44306	32.037	4.9038	20895. 20895.	1-4436	1305.0	1.2009	1.0872	28.96
44600	44505	32.037	4.8570	20895.	1.4299	1305.6	1.1894	1.0977	28.96
44800	44704	32.036	4.8106	20895.	1.4163	1305.6	1.1781	1-1082	28.96
45000	44903	32.036	4.7647 - 1	20896.	1-4028 +23	1305.4	1.1669 + 9	1-1189 - 6	28.96
45200	45102	32.035	4.7192	20896.	1.3894	1305.6 1305.6 1305.6	1.1558	1.1297	28.96
45400	4530.1	32.034	4.6742	20897.	1.3762	1305.4	1.1447	1.1405	28.96
45600	45501	32.034	4.6296	20897.	1.3631	1305.6	1 1770	1.1515	28.96
45800	15700	12 037	4.5854	20897.	1 3501	1305.6	1.1338 1.1230	1 1424	28.96
	45700	32.033	4.3034	20071.	1.3501	1305.6	1.1230	1.1626	
46000	45899	32.033	4.5416 4.4983	20898.	1.3372	1305.6 1305.6 1305.6	1.1123 1.1018 1.0913	1.1757 1.1850 1.1964	28.96
45200	46098	32.032	4.4983	20898.	1.3245	1303.0	1.1018	1 - 1850	28.96
46400	46297	32.031	4.4554	20899.	1.3119	1305.0	1.0913	1 - 1964	28.96
46600	46496	32.031	4-4129	20899.	1,2994	1305.6	1.0809	1.2079	28.96
46800	46695	32.030	4-3707	20899.	1.2870	1305.6	1.0706	1.2196	28.96
47000	46894	32.030	4.3290 - 1	20900.	1.2747 +22	1305.6	1-0604 4 9	1-2313 - 4	28.96
¥7200	47093	32.029	4.2877	20900 -	1.2747 +23 1.2626 1.2506	1305.6	1.0604 + 9	1-2313 - 6 1-2431 1-2551	28.96
47200 47400	47293	32.028	4.2468	20900. 20901.	1.2504	1305.6	1.0403	1.2551	28.96
47600	47492	32.028	4.2063	20901.	1.2367	1305.6	1.0304	1.2671	28.96
47800 47800	47691	32.027	4.2063 5.1661	20901.	1.2269	1305.6	1.0204	1 2702	28.96
8000	47890	32.02.1	4.1264	20902.	1.2152	1305.6	1.0206	1-2793	28.94
		32.026	4.1204	20902.	1.2132	1202.0	1.0100	1.2710	
£8200	48089	32-026	4-0870	20902	1.2036	1305-6	1-0012	1.3040	28.96
48400	48288	32.025	4.0080	20903.	101722	1305.6	9.9168 + 8	1.3100	28.96
48600	48487	32.025	4.0094	20903.	1.1808	1305.6	9.8223	1-3292	28.96
48800	48686	32.024	3.9711	20903.	1.1696	1305.6	9.7288	1.3420	28.96
49000	48885	32.023	3.9332 - 1	20904.	1.1584 +23	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	9.6361 + 8	1.3549 - 6	28.96
49200	49084	32.023	3.8957	20904.	1.1474	1305.6	9.5444	1.3679	28.96
49400	49283	32.023 32.022	3.8586	20905.	1.1365	1305.6	9.4535	1.3811	28.96
49600	49482	32.022	3.8217	20905.	1.1256	1305.4	9.3635	1-3944	28.96
19800	49631	32.021	3.7853	20905.	1.1149	1305.4	9.2743	1.4078	28.96
50000	49880	32.020	3.7492	20906.	1.1043	1305.4	9.1860	1-4213	28.96
50200	50079	32.020	3.7134	20906.	1.0938	1305.6	9.0986	1.4350	28.76
50400			3.1137	20907.	1.0834	1302.0		1.4488	28.96
	50278	32.019	3-6780	20907.	1.0731	1303.0	9.0120 8.9262	1-4627	28.96
50600 50800	50478 50677	32.018 32.018	3.6429 3.6081	20907.	1.0629	1305.6 1305.6 1305.6	8.8412	1.4767	28.96
51000	50876	32.017	3.5737 - 1	20908-	1.0527 +23	1305.6	8.7570 + 8	1.4909 - 6	28.94
51200	51075	32.017	3.5396	20908. 20909.	1.0427	1305.6 1305.6	8.6736	1-5053	28.76
51400	51274	32.016	3.5059	20909.	1.0328	1305.0	8.5911	1-5197	28.96
51600	51473	32.015	3.4724	20909.	1.0230	1305.6	8.5093	1.5343	28.96
51800	51672	32.015	3.4393	20909.	1.0132	1305.6	8.4283	1.5491	28.96
52000	51871	32.014	3.4065	20910.	1.0036	1305.6	8.3480	1.5640	28.96
52200	52070	32-014	3.3740	20910.	9.9402 +22	1305.6	8.2686	1.5790	28.96
52400	52269	32.013	3.3418	20911.	9.8456	1305.6	8.1899	1.5942	28.96
52600	52468	32.012	3.3099	20911.	9.7518	1305.6	8.1119	1.6095	28.94
52800	52667	32.012	3.2784	20911.	9.6590	1305.6	8.0347	1.6250	28.96
53000	52866	32.011	3.2471 - 1	20912.	9.5671 +22	1305.6	7.9582 + 8	1.6406 - 6	28.96
53200 ·	53065	32.011	3.2161	20912.	9.4760	1305.6	7.8825	1-6564	28.96
53400	44655	32.010	3-1855	20913.	9.3858	1305.6	7.8074	1-6723	28.96
53600	53264	32.009	3.1551	20913.	9.2965	1305.6	7.7331	1-6883	28.96
53800	53463 53662			20913.	9.2080	1305.6	7.6595	1.7046	28.96
54000	33002	32.009	3.1250 3.0952	20914.	9.1204	1305.6	7.5866	1.7209	28.96
	53861 54059	32.008	3.0734	20714.	9.0336	1305.6	7.5144	1.7375	28.96
54200	54059	32.007	3.0657	20914.		1303.0	1.43154 7.6600	101313	
54400	54258 54457	32.007	3.0364	20915.	8.9476	1305.6	7.4429 7.3721	1-7542	28.96
54600 54800	54457	32.006	3.0075 2.9788	20915. 20915.	8.8624 8.7781	1305.6	7.3721 7.3019	1.7710	28.96
U	54656	32.006	4.7100	207134	. ******	1303.6	143017	'	*****
55000	54855	32.005	2.9504 - 1	20916.	8.6946 +22	1305.6	7.2324 + 8	1.8052 - 6	28.96
55200	55054	32.004	2.9223	20916.	8.6118	1305.6	7.1636	1.8226	28.96
55400	55253	32.004	2.8944	20917.	8.5299	1305.6	7.0954	1-8401	28.96
55600	55452	32.003	2.8668	20917.	8.4487	1305.6	7.0279	1.8578	28.96
55800	55651	32.003	2.8395	20917.	8.3683	1305.6	6.9610	1.8756	28.96
56000	55850	32.002	2.8124	20918.	6.2887	1305.6	6.8948	1.8936	28.96
56200	56049	32.001	2.7856	20918.	8.2098	1305.6	6.8292	1.9118	28.94
56400	56248	32.001	2.7590	20719.	8.1317	1305.6	6.7642	1-9302	28.96
	56447			20919.	8.0543	1305.6	6.69.98	1.9487	28.96
56600 56800	56646	32.000	2.7327	20919.	7.9777	1305.6	6.6361	1.9675	28.96
	1	.]			' '				I
57000	56845	31.999	2.6809 - 1	20920-	7.9018 +22	1305.6	6-5729 + 8	1.9864 - 6	28.96
57200	57044	31.998	2.6553	20920.	7.8266	1305.6	6.5104	2.0054	28.96
57400	57242	31-998	2.6300	20921.	7.7521	1305.6	6.4485	2.0247	28.96
57600	57441	31.997	2.6049	20921.	7.6783	1305.6	6.3871	2.0441	28.96
57800	57640	31.996	2.5801	20921.	7.6053	1305.6	6.3263	2.0638	28.96
58000	57839	37.996	2.5555	20922.	7.5329	1305.6	6.2661	2.0836	28.96
58200	58038	31.995	2.5311	20922.	7.4613	1305.6	6.2065	2.1036	28.96
	58237	31.295	2.5070	20923.	7.3903	1305.6	6.1475	2.1236	28-96
58400		21 0/4	2.4831	20923.	7.3200	1305.6	6.0890	2.1442	28.96
58400 58400	58434	1 31.774							
58400 58600 58600	58436 58635	31.994 31.993	2.4594	20923.	7.2503	1305.6	6.0311	2.1648	28.96

TABLE V.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	lude	Accel.	Specific	Pressure scale	Number	Particle		Mean free	
H, ft	Z, ft	gravity a ft sec-2	weight ω, lb ft ⁻² sec ⁻²		density n, ft ⁻³	speed ∇, ft sec	frequency ν , sec $^{-1}$	path L, ft	weight M
59000 59200 59400 59600 60000 60200 60400 60600 60800	59167 59369 59570 59771 59972 60173 60374 60575 60777	31.992 31.992 31.991 31.990 31.999 31.989 31.988 31.987	2.4165 - 1 2.3934 2.3704 2.3477 2.3252 2.3029 2.2808 2.2590 2.2373 2.2159	20924. 20924. 20925. 20925. 20926. 20926. 20927. 20927.	7.3241 ¢22 7.0560 6.985 6.9216 6.8554 6.7898 6.7249 6.6605 6.5968 6.5337	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	5.9261 + 8 5.8694 5.8133 5.7576 5.7026 5.6480 5.5940 5.5805 5.4875 5.4350	2.2032 - 6 2.2244 2.2459 2.2676 2.2895 2.3116 2.33540 2.3555 2.3793 2.4023	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
61000 61200 61400 61600 61800 62000 72200 62400 62600 62800	61179 61380 61581 61783 61984 62185 62386 62587 62788 62990	31.986 31.985 31.985 31.984 31.984 31.983 31.982 31.982 31.981	2.1946 - 1 2.1736 2.1528 2.1321 2.1117 2.0915 2.0714 2.0515 2.0319 2.0124	20928. 20929. 20929. 20929. 20930. 20930. 20931. 20931. 20931.	6.4712 +22 6.5093 6.3480 6.2873 6.2271 5.1675 6.1085 6.0501 5.9922 5.9349	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	5.3830 + 8 5.3315 5.2805 5.2299 5.1799 5.1304 5.0813 5.0827 4.9845 4.9368	2.4255 - 6 2.4489 2.4725 2.4964 2.5205 2.5249 2.5695 2.5943 2.6193 2.6446	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
63000 63200 63400 63600 64000 64000 64000 64600 64800	63191 63392 63593 63795 63996 64197 64398 64609 64801 65002	31.980 31.979 31.979 31.978 31.977 31.977 31.976 31.976 31.975	1.9731 - 1 1.9740 1.9751 1.9363 1.9178 1.8994 1.8812 1.8632 1.8633 1.8276	20932. 20933. 20933. 20934. 20934. 20935. 20935. 20935.	5.8781 +22 5.8219 5.7642 5.7110 5.6564 5.6023 5.5487 5.4956 5.4430 5.3909	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	4.8896 + 8 4.8428 4.7965 4.7506 4.7052 4.6602 4.6156 4.5714 4.5277 4.4844	2.6702 - 6 2.6960 2.7220 2.7483 2.7749 2.8017 2.8287 2.8560 2.8836 2.9115	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
65000 65200 65400 65600 65800 66000 66200 66400 66600 66800	65203 65404 65606 65807 66003 66210 66411 66612 66813 67015	31.974 31.973 31.973 31.972 31.971 31.971 31.970 31.969 31.969	1.8101 - 1 1.7927 1.7756 1.77585 1.7585 1.7412 1.7241 1.7071 1.6902 1.6736 1.6571	20936. 20937. 20937. 20937. 20943. 20949. 20956. 20968. 20975.	5.3394 +22 5.2883 5.2377 5.1876 5.1366 5.0861 5.0341 4.9865 4.9375 4.8890	1305.6 1305.6 1305.6 1305.8 1306.0 1306.2 1306.3 1306.5 1306.7	4.8415 + 8 4.3990 4.3569 4.3152 4.2734 4.2319 4.1909 4.1502 4.1100 4.0702	2.9396 - 6 2.9680 2.9967 3.0256 3.0556 3.0556 3.1167 3.11476 3.1789 3.2104	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
67000 67200 67400 67600 67800 68000 68200 68400 68600 68800	67216 67417 67619 67820 68021 68222 68424 68625 68826 69028	31.968 31.967 31.966 31.966 31.965 31.965 31.963 31.963 31.963	1.6408 - 1. 1.6246 1.6087 1.5772 1.5772 1.5617 1.5463 1.5311 1.5161 1.5012	20981. 20987. 20994. 21000. 21006. 21012. 21019. 21025. 21031. 21038.	4.8409 +22 4.7933 4.74433 4.66997 4.6535 4.6079 4.56026 4.5179 4.4797	1306.9 1307.1 1307.3 1307.4 1307.6 1307.6 1308.0 1308.2 1308.4 1308.5	4.0307 + 8 3.9917 3.9530 3.9148 3.8769 3.8394 3.8023 3.7655 3.7291 3.6930	3.2423 - 6 3.2745 3.3059 3.3397 3.3729 3.4063 3.4400 3.4761 3.5085 3.5432	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
69000 69200 69400 69800 70000 70200 70400 70600 70800	69229 69430 59632 69833 70034 70236 70437 70638 70840 71041	31.961 31.960 31.960 31.959 31.958 31.958 31.957 31.957	1.4864 - 1 1.5718 1.4574 1.4431 1.4289 1.4149 1.4011 1.3873 1.3737 1.3603	21044. 21050. 21056. 21063. 21069. 21075. 21082. 21084. 21094.	4.3863 +22 4.3636 5.2587 4.2587 4.2170 4.1757 4.1349 4.0966 4.0546	1308.7 1306.9 1309.1 1309.3 1309.5 1309.6 1310.0 1310.2	3.6574 + 8 3.6220 3.5871 3.5524 3.5182 3.4506 3.4506 3.4173 3.3844 3.3518	3.5783 - 6 3.6137 3.6856 3.7220 3.7588 3.7959 3.8334 3.8713 3.9095	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
71000 71200 71400 71600 71600 72000 72000 72400 72600 72800	71243 7144 71645 71847 72048 72249 72451 72652 72854 73055	31.955 31.955 31.954 31.953 31.953 31.952 31.952 31.951 31.950	1.3470 - 1 1.3338 1.3207 1.3078 1.2950 1.2823 1.2698 1.2574 1.2451 1.2330	21107. 21113. 21119. 21126. 21132. 21138. 21145. 21157. 21164.	3.9755 +22 3.9367 3.8982 3.8025 3.7852 3.77852 3.77175 3.6377	1310.6 1310.7 1310.9 1311.1 1311.3 1311.5 1311.6 1311.6 1312.0	3.3195 + 8 3.2875 3.2558 3.2245 3.1935 3.1627 3.1323 3.1022 3.0724 3.0429	3.9481 - 6 3.9870 4.0263 4.0661 4.1061 4.1875 4.2287 4.2703 4.3124	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
73000 73200 73400 73600 73600 74000 74200 74200 74600 74600 74800	73256 73458 73659 73861 74062 74264 74465 74666 74868 75069	31.949 31.949 31.948 31.947 31.945 31.945 31.945 31.944 31.944	1-2209 - 1 1-2090 1-1972 1-1855 1-1739 1-1625 1-1512 1-1399 1-1288 1-1178	21170. 21176. 21183. 21189. 21195. 21201. 21208. 21214. 21220. 21227.	3.4042 +22 3.5691 3.5343 3.4658 3.4658 3.4321 3.7656 3.3329 3.3329 3.3329	1312.4 1312.6 1312.7 1312.9 1313.1 1513.3 1313.5 1313.7 1313.8	3.0136 + 8 2.9847 2.9560 2.9276 2.8995 2.8717 2.8442 2.8169 2.7899 2.7631	4.3548 - 6 4.3977 4.4009 4.4046 4.5287 4.5732 4.6181 4.6635 4.7093 4.7555	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE ▼.-Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altite	ude	Accel.	Specific Weight	Pressure scale	Number	Particle speed	Collision frequency	Mean free	iviolecula: weight
Z, ft	H, ft	gravity g, ft sec ⁻²	ω, lb ft ⁻² sec ⁻²	height H _P , ft		∇, ft sec'			M
59000 59200 59400 59400 59800 60000 60200	58834 59032 59231 59430 59629 59828 60027	31.993 31.992 31.992 31.991 31.990 31.990	2.4360 - 1 2.4128 2.3898 2.3670 2.3444 2.3221 2.3000	20924. 20924. 20925. 20925. 20925. 20926.	7.1814 +22 7.1131 7.0454 6.9784 5.9120 6.8462 6.7811	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	5.9737 + 8 5.9169 5.8606 5.8049 5.4949 5.6949	2.1856 - 6 2.2066 2.2278 2.2492 2.2708 2.2926 2.3146	28.964 28.964 28.964 28.964 28.964 28.964
60400 60600 60800	60226 60424 60623	31.988 31.988 31.987	2.2780 2.2563 2.2348	20927. 20927. 20927.	6.7166 6.6527 6.5895	1305.6 1305.6 1305.6	5.5871 5.5340 5.4813	2.3368 2.3593 2.3819	28.964 28.964 28.964
61000 61200 61400 61600 61800 62000 62000 62400 62600 62800	60822 61021 61220 61419 61617 61816 62015 62214 62413 62611	31.987 31.986 31.985 31.985 31.984 31.984 31.983 31.982 31.982	2.2135 - 1 2.1924 2.1715 2.1508 2.1508 2.1303 2.1100 2.0899 2.0700 2.0503 2.0308	20928. 20928. 20929. 20929. 20930. 20930. 20931. 20931.	6.5268 +22 6.4647 6.4032 6.3423 6.2620 6.2225 6.1045 6.0046 5.9889	7305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	5.4292 + 8 5.3776 5.3264 5.2757 5.2256 5.1759 5.1267 5.0296 4.9818	2.4048 = 6 2.4279 2.4512 2.4747 2.4985 2.5225 2.55467 2.5712 2.5959 2.6208	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
63000 63200 63400 63600 64000 64000 64000 64600 64600 64800	62810 63009 63208 63407 63605 63804 64003 64202 64400 64599	31.981 31.980 31.979 31.979 31.978 31.977 31.977 31.976 31.976	2.0114 - 1 1.9922 1.9733 1.9535 1.9535 1.9174 1.8991 1.8810 1.8631 1.8454	20932. 20933. 20933. 20933. 20934. 20935. 20935. 20935.	5.9320 +22 5.8756 5.8197 5.7643 5.7095 5.6552 5.6015 5.55482 5.4955 5.4432	1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6 1305.6	4.9344 + 8 4.8875 4.8410 4.7950 4.7494 4.7042 4.6595 4.6152 4.5713 4.5278	2.6459 - 6 2.6713 2.6970 2.7229 2.7490 2.7754 2.8021 2.8290 2.8561 2.8835	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
65000 65200 65400 65600 65800 66200 66400 66400 66600	64798 64997 65196 65394 65593 65792 65991 66189 66388 66587	31.974 31.974 31.973 31.973 31.972 31.971 31.971 31.970 31.970	1.8278 - 1 1.8104 1.7931 1.7760 1.7750 1.7591 1.7419 1.7249 1.7080 1.6913	20936. 20937. 20937. 20937. 20943. 20949. 20955. 20962.	5.3915 +22 5.3802 5.2894 5.2391 5.1893 5.1893 5.1885 5.0885 5.0887 4.9895	1305.6 1305.6 1305.6 1305.6 1305.4 1305.8 1306.0 1306.1 1306.3 1306.5	4.4848 + 8 4.4422 4.3597 4.3587 4.2751 4.2751 4.2739 4.1937 4.1527 4.1127	2.9112 - 6 2.9391 2.99574 2.9958 3.0246 3.0244 3.0845 3.1150 3.1457 3.1768	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
67000 67200 67400 67400 67400 68000 68200 68400 68400 68600	66785 66984 67183 67382 67580 67779 67978 68176: 68375	31.968 31.968 31.967 31.966 31.965 31.965 31.964 31.963	1.6583 - 1 T.6721 1.6260 1.6101 1.5748 1.5788 1.5634 1.5481 1.5330 1.5180	20974. 20980. 20987. 20993. 20999. 21005. 21018. 21018. 21024. 21030.	4.8925 +22 4.8447 4.77974 4.7506 4.7542 4.5684 4.6129 4.5680 4.5684 4.4794	1306.7 1306.9 1307.1 1307.2 1307.4 1307.6 1307.8 1308.0 1308.1	4.0731 + 8 4.0339 3.9756 3.9756 3.9185 3.8809 3.8436 3.87700 3.77338	3.2081 - 6 3.2398 3.2717 3.5039 3.3365 3.3694 3.4025 3.4360 3.4698 3.5040	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
69000 69200 69400 69600 70000 70200 70400 70600 70800	68772 68971 69170 69368 69567 69766 69964 70163 70362 70560	31.962 31.962 31.961 31.960 31.959 31.959 31.958 31.957	1.5032 - 1 1.4886 1.4740 1.4597 1.4597 1.4314 1.4314 1.4036 1.3899 1.3764	21037. 21043. 21049. 21055. 21062. 21068. 21074. 21081. 21087. 21093.	4.4358 +22 4.3926 4.3498 4.3075 4.2656 4.2241 4.1830 8.1424 4.1021	1308.5 1308.7 1308.9 1309.1 1309.2 1309.4 1309.6 1310.0	3.6980 + 8 3.6625 3.6274 3.5581 3.5581 3.5240 3.4902 3.4568 3.4237 3.3909	3.5384 - 6. 3.5732 3.6083 3.6038 3.6796 3.71572 3.7522 3.7522 3.8637	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
71000 71200 71400 71400 71800 72000 72200 72400 72600 72800	70759 70958 71156 71355 71554 71752 71951 72150 72348 72547	31.956 31.955 31.955 31.954 31.954 31.953 31.952 31.952 31.951	1.3630 ~ 1 1.3498 1.3366 1.3236 1.3108 1.2781 1.2854 1.2730 1.2606 1.2484	21099. 21106. 211-12. 21118. 21124. 21131. 21137. 21143. 21149. 21156.	4.0228 +22 3.9838 3.9451 3.9069 3.8690 3.6314 3.7743 3.77575 3.7211 3.6851	1310.3 1310.5 1310.7 1310.9 1311.1 1311.2 1311.4 1311.6 1311.8 1312.0	3.3584 + 8 3.3263 3.2944 3.2629 3.2629 3.2629 3.1703 3.1400 3.1100 3.0803	3.9016 - 6 3.9399 3.9785 4.0175 4.0568 4.0965 4.1771 4.2180 4.2592	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
73000 73200 73400 73600 73800 74000 74200 74400 74600 74800	72745 72944 73143 73341 73540 73738 73937 74135 74334 74533	31.950 31.949 31.949 31.948 31.946 31.946 31.946 31.945	1.2363 - 1 1.2243 1.2124 1.2007 1.1890 1.1775 1.1661 1.1548 1.1436 1.1436	21162. 21168. 21174. 21181. 21187. 21193. 21199. 21206. 21212.	3.6494 +22 3.6141 3.5791 3.5445 3.5445 3.4763 3.4427 3.4094 3.3765 3.3439	1312.1 1312.3 1312.5 1312.7 1312.7 1313.1 1313.2 1313.4 1313.6	3.0509 + 8 3.0218 2.9930 - 2.9644 2.9362 2.9362 2.9082 2.8530 2.8259 2.7990	4.3009 - 6 4.3429 4.3853 5.4282 4.4714 4.5151 4.5591 4.6036 4.6485 4.6938	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE X.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

			GEOPOTEN		IIIUDE, EN	GLISH O			
Altit		Accel. due to	Specific weight	Pressure scale height	Number density	Particle speed	Collision.	Mean free	weight
H, ft	Z, ft	g, ft sec-2	weight ω, lb ft ⁻² sec ⁻²	H _P , ft	n, ft ⁻⁸	∇, ft sec '	ν, sec ⁻¹	L, ft	M
75000: 75200 75400 75400 75600 75800 76000 76200 76400 76400 76800	75271 75472 75674 75875 76077 75278 76479 76681 76682 77084	31.943 31.942 31.941 31.941 31.941 31.940 31.939 31.939 31.938 31.937	1.1070 - 1. 1.0962 1.0855 1.0750 1.0045 1.00439 1.0439 1.0338 1.0237 1.0138	21233. 21239. 21246. 21252. 21258. 21264. 21277. 21277. 21283. 21290.	3-2684 +22 3-2367 3-2052 3-1741 3-1433 3-1128 3-0826 3-0527 3-0231 2-9938	1314.2 1314.4 1314.6 1314.8 1314.9 1315.1 1315.5 1315.5 1315.7	2.7367 + 8: 2.7105 2.6845 2.6588 2.6334 2.6082 2.5832 2.5832 2.5585 2.5340 2.5096	4.8022 - 6 4.8493 4.8969 4.9449 4.9934 5.0023 5.0917 5.1416 5.1919 5.2428	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
77000 77200 77400 77600 77800 78000 78200 78200 78600 78800	77285 77487 77688 77890 78091 78293 78494 78696 78897 79099	31.937 31.936 31.936 31.935 31.934 31.934 31.933 31.933 31.933	1.0039 - 1 9.9417 - 2 9.8452 9.7497 9.6551 9.5615 9.4688 9.33770 9.2861 9.1962	21296. 21302. 21309. 21315. 21321. 21328. 21334. 21340. 21346.	2.9648 +22 2.9360 2.9076 2.8794 2.8515 2.8240 2.7966 2.7696 2.7428 2.7163	1316.0 1316.2 1316.4 1316.6 1316.6 1316.9 1317.1 1317.3 1317.5	2.4658 + 8 2.4621 2.4386 2.4153 2.3923 2.3694 2.3468 2.3244 2.3023 2.2803	5.2941 - 6 5.3459 5.3982 5.4510 5.5543 5.5580 5.6124 5.6672 5.7784	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
79000 79200 79400 79600 79800 80000 80200 80400 80600 80800	79300 79502 79703 79905 80107 80308 80510 80711 80913 81114	31.931 31.930 31.929 31.929 31.928 31.928 31.927 31.926 31.926	9.1071 - 2 9.0189 8.9316 8.8452 8.7596 8.6749 8.5910 8.5080 8.4258 8.3444	21359. 21365. 21372. 21378. 21384. 21391. 21397. 21403. 21410. 21416.	2.6900 +22 2.6640 2.6383 2.6128 2.5876 2.5379 2.5134 2.4892 2.4652	1317.8 1318.0 1318.2 1318.4 1318.6 1318.8 1318.9 1319.1 1319.3	2.2586 + 8 2.2371 2.2158 2.1947 2.1738 2.1531 2.1531 2.1326 2.1124 2.0923 2.0724	5.8345 - 6 5.8917 5.9492 6.0072 6.0058 6.1249 6.1846 6.2448 6.3056 6.3670	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
81000 81200 81400 81600 81800 82000 82200 82400 82600 82600	81316 81517 81719 81921 82122 82324 82525 82727 82928 83130	31.925 31.924 31.923 31.922 31.922 31.922 31.920 31.920 31.920	8.2638 - 2 8.1840 8.1050 8.0768 7.9494 7.8727 7.7968 7.7216 7.6412 7.5735	21422. 21429. 21435. 21441. 21447. 21454. 21460. 21466. 21473. 21479.	2.4414 +22 2.4179 2.3946 2.3715 2.33487 2.3261 2.3037 2.2815 2.2596 2.2379	1319.7 1319.8 1320.0 1320.2 1320.4 1320.6 1320.8 1320.9 1321.1	2.0527 + 8 2.0332 2.0139 1.9948 1.9958 1.95571 1.9385 1.9201 1.9019 1.8839	6.4290 - 6 6.4915 6.5547 6.6184 6.6828 6.7477 6.8133 Å.8795 -6.9463 7.0137	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
83000 83400 83400 83600 84000 84000 84400 84600 84600	83332 83533 83735 83937 84138 84340 84541 34743 84945 85146	31.918 31.918 31.917 31.917 31.916 31.915 31.914 31.914 31.914	7.5006 - 2 7.4284 7.3568 7.2159 7.1465 7.0778 7.0098 6.9424 6.8757	21485. 21492. 21498. 21504. 21511. 21517. 21523. 21530. 21536. 21542.	2.2163 +22 2.1950 2.1740 2.1531 2.1324 2.1119 2.0917 2.0716 2.0517 2.0320	1321.5 1321.7 1321.8 1322.0 1322.2 1322.4 1322.6 1322.8 1322.9 1323.1	1.8660 + 8 1.8484 1.8308 1.8135 1.7763 1.7793 1.77625 1.7458 1.7293 1.7130	7.0818 - 6 7.1505 7.2199 7.2899 7.3606 7.4319 7.5039 7.5766 7.6500 7.7241	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
85000 85200 85400 85600 85800 86000 86200 86400 86600	85348 85550 85751 85953 86154 86356 86558 86759 86961 87163	31.912 31.912 31.911 31.910 31.910 31.909 31.909 31.908 31.907	6.8097 - 2 6.7443 6.6795 6.6154 6.5519 6.4891 6.4269 6.3652 6.3042 6.2438	21549. 21555. 21561. 21567. 21567. 21580. 21586. 21586. 21599. 21605.	2.0.126 +22 1.9933 1.9742 1.9753 1.9365 1.9160 1.8997 1.8815 1.8635 1.8457	1323.3 1323.5 1323.7 1323.8 1324.2 1324.4 1324.6 1324.7 1324.7	1.6968 + 8 1.6808 1.6649 1.6492 1.6336 1.6182 1.6029 1.5878 1.5728 1.5580	7.7088 - 6 7.8743 7.9505 8.0274 8.1050 8.1833 8.2624 8.3422 8.4228 8.5041	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
87000 87200 87400 87400 87800 88000 88200 88400 88400 88600	87364 87566 87768 87970 88171 88373 88575 88776 88978-	31.906 31.906 31.905 31.904 31.904 31.903 31.902 31.902 31.901	6.1840 - 2 6.1248 6.0661 6.0081 5.9506 5.8937 5.8373 5.7815 5.7262 5.6715	21612. 21618. 21624. 21631. 21637. 21643. 21650. 21656. 21662. 21669.	1.0280 +22 1.8105 1.7932 1.7761 1.7591 1.7424 1.7257 1.7093 1.6929 1.6768	1325.1 1325.3 1325.5 1325.7 1325.8 1326.0 1326.2 1326.4 1326.6 1326.7	1.5433 + 8 1.5288 1.5144 1.5001 1.4860 1.4720 1.4581 1.4444 1.4308 1.4174	8.5862 - 6 8.6691 8.7527 8.8371 8.9223 9.0083 9.0951 9.1828 9.2712 9.3605	26.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
89000 89200 89400 89600 89800 90000 90200 90400 90600	89381	31.900 31.899 31.899 31.898 31.898 31.897 31.896 31.896 31.895	5.6173 - 2: 5.5637 5.5105 5.4579 5.4058 5.3543 5.3032 5.2626 5.2026 5.1530	21675. 21681. 21688. 21694. 21700. 21707. 21713. 21719. 21725.	1:6608 +22 1:6450 1:6293 1:6138 1:5984 1:5832 1:5532 1:5532 1:5384 1:5238	1326.9 1327.1 1327.3 1327.5 1327.6 1327.8 1328.0 1328.2 1328.4	1.4041 + 8 1.3708 1.3778 1.3649 1.3520 1.3394 1.3268 1.3143 1.3020 1.2898	9:4506 - 6 9:5415 9:6333 9:7260 9:8195 9:9139 1:0009 - 5 1:0202 1:0300	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

Altit	üde	Accel:	I Specific	Pressure scale	Number	Particle	Collision	Mean free	
Z, ft	H, ff		weight ω , lb ft ⁻² sec ⁻²		density: n, f.t ⁻³	speed ∇, ft sec '	frequency ν , sec ⁻¹	path L, ft	weight M
75000 75200 75400 75600 75800 76000 76200 76400 76600 76800	74731 74930 75128 75327 75525 75724 75923 76121 76320 76518	31.944 31.943 31.943 31.942 31.941 31.941 31.940 31.940 31.939	1.1216 - 1 1.1108 1.1000 1.0894 1.0789 1.0685 1.0581 1.0479 1.0378 1.0278	21224. 21231. 21237. 21243. 21250. 21256. 21268. 21275. 21281.	3.3116 +22 3.2797 3.2480 3.2167 3.1857 3.1550 3.1246 3.0945 3.0945 3.0352	1314.0 1314.1 1314.3 1314.5 1314.7 1314.9 1315.0 1315.2 1315.4 1315.6	2.7723 + 8 2.7459 2.7198 2.6940 2.6684 2.6430 2.6179 2.5930 2.5684 2.5440	4.7396 - 6 4.7858 4.8324 4.8794 4.9270 4.9749 5.0233 5.0722 5.1215 5.1713	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
77000 77200 77400 77600 77800 78000 78200 78400 78600 78600	76717 76915 77114 77312 77531 77709 77908 78106 78305 78503	31.938 31.937 31.937 31.936 31.935 31.935 31.933 31.933 31.933	1.0179 - 1 1.0081 9.9836 - 2 9.8874 9.7922 9.6979 9.6045 9.5121 9.4205 9.3299	21287. 21293. 21300. 21306. 21312. 21318. 21325. 21331. 21337. 21343.	3.0059 +22 2.9770 2.9484 2.9200 2.8919 2.8642 2.8365 2.8094 2.7824 2.7557	1515.8 1316.0 1316.1 1316.3 1316.5 1316.7 1316.9 1317.0 1317.2 1317.4	2.5199 + 8 2.4960 2.4723 2.4489 2.4257 2.4027 2.3799 2.3574 2.3351 2.3130	5.2215 - 6 5.2723 5.3235 5.3752 5.4274 5.4800 5.5332 5.5869 5.6410 5.6957	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 25.964 25.964
79000 79200 79400 79400 79800 80000 80400 80400 80600 80800	78702 78900 79099 79297 79496 79694 79893 80091 80290 80488	31.932 31.931 31.930 31.930 31.929 31.929 31.928 31.927 31.927	9.2402 - 2 9.1514 9.0634 8.9764 8.8901 8.8048 8.7203 6.6366 8.5537 8.4717	21350. 21356. 21362. 21368. 21375. 21381. 21387. 21394. 21400.	2.7293 +22 2.7031 2.6771 2.6515 2.6261 2.6009 2.5760 2.5513 2.5269 2.5027	1317.6 1317.8 1317.9 1318.1 1318.3 1318.5 1318.7 1318.8 1319.0 1319.0	2.2911 + 8 2.2694 2.2480 2.2267 2.2057 2.1848 2.1642 2.1438 2.1235 2.1035	5.7509 - 6 5.8668 5.8628 5.9196 5.9769 6.0347 6.0931 6.1520 6.2115 6.2715	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
81000 81200 81400 81400 81600 82000 82200 82400 82400 82800	80687 80885 81083 81282 81482 81479 81877 82076 62274 82473	31.926 31.925 31.924 31.924 31.923 31.922 31.922 31.921 31.921	8.3905 - 2 8.3100 8.2304 8.1516 8.0735 7.9962 7.9197 7.8439 7.7688 7.6945	21412. 21419. 21425. 21431. 21437. 21444. 21450. 21456. 21462. 21469.	2.4787 +22 2.4550 2.4315 2.4083 2.3853 2.3625 2.3399 2.3176 2.2954 2.2735	1319.4 1319.6 1319.7 1319.7 1320.1 1320.3 1320.5 1320.6 1320.8 1321.0	2.0836 + 8 2.0640 2.0445 2.0253 2.0062 1.9873 1.9686 1.9500 1.9317	6.3321 - 6 6.3933 6.4550 6.5173 6.5802 6.6437 6.7078 6.7725 6.8377 6.9036	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
83000 83200 83400 83600 83600 84200 84200 84000 84600	82671 82869 83068 63266 83465 83661 84060 84258 84457	31.919 31.919 31.918 31.917 31.916 31.916 31.915 31.915	7.6210 ~ 2 7.5481 7.4760 7.4046 7.3339 7.2639 7.1946 7.1259 7.0580 6.9907	21475. 21481. 21487. 21494. 21500. 21506. 21513. 21519. 21525. 21531.	2.2518 +22 2.2304 2.2091 2.1880 2.1672 2.1465 2.1261 2.1058 2.0858 2.0660	1321.2 1321.4 1321.5 1321.7 1321.7 1322.1 1322.3 1322.4 1322.6 1322.8	1.8955 + 8. 1.8777 1.8600 1.8425 1.8252 1.8081 1.7711 1.7743 1.7576 1.7412	6.9701 - 6 7.0372 7.1050 7.1734 7.2424 7.3121 7.3824 7.4534 7.5250 7.5973	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
85000 85200 85400 85600 85600 86200 86400 86400 86800	84655 84853 85052 85250 85448 85645 86043 86242 86440	31.913 31.912 31.912 31.911 31.910 31.910 31.909 31.908	6.9240 - 2 6.8580 6.7927 6.7280 6.6639 6.6005 6.5377 6.4755 6.4139 6.3529	21538 . 21544 . 21550 . 21553 . 21563 . 21569 . 21575 . 21588 . 21594 .	2.0463 +22 2.0268 2.0076 1.9885 1.9696 1.9509 1.9323 1.9140 1.8958 1.8778	1323.0 1323.2 1323.3 1323.5 1323.7 1323.7 1324.1 1324.2 1324.4 1324.6	1-7248 + 8 1-7087 1-6926 1-6768 1-6611 1-6455 1-6301 1-6148 1-5997	7.6703 - 6 7.7439 7.8183 7.8933 7.9690 8.0454 8.1226 8.2004 8.2790 8.3583	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
87000 87200 87400 87600 67600 88000 88400 88400 88400 88400	86637 87035 87234 87432 87432 87630 87629 88027 88225 88423	31.907 31.907 31.906 31.905 31.905 31.904 31.904 31.903	6.2925 ~ 2 6.2327 6.1.735 6.1.149 6.0568 5.9994 5.9424 5.8861 5.6302 5.7750	21600. 21607. 21613. 21619. 21625. 21632. 21638. 21644. 21650. 21657.	1.8600 +22 1.8424 1.8249 1.8076 1.7905 1.7735 1.77567 1.7401 1.7236 1.7073	1324.8 1325.0 1325.1 1325.3 1325.5 1325.7 1325.7 1325.9 1326.0 1326.2	1.5699 + 8 1.5553 1.55407 1.5263 1.5121 1.4980 1.4840 1.4701 1.4701	8.4384 - 6 8.5192 8.6007 8.6830 8.7661 8.8499 8.9345 9.0199 9.1061 9.1931	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
89000 89200 89400 89600 99600 90200 90400 90400 90800	88622 88820 89018 89217 89413 89613 89812 90010 90208 90406	31.901 31.901 31.900 31.899 31.898 31.898 31.897 31.897	5.7202 - 2 5.6660 5.612k 5.5592 5.5066 5.4545 5.4029 5.3518 5.3012 5.2510	21663. 21669. 21675. 21682. 21688. 21694. 21701. 21707. 21713. 21719.	1.6912 +22 1.6752 1.6594 1.6437 1.6281 1.6120 1.5975 1.5825 1.5675	1326.6 1326.8 1326.9 1327.1 1327.3 1327.5 1327.7 1327.8 1328.0	1.4294 + 8 1.4160 1.4028 1.3898 1.3768 1.3513 1.3387 1.3263	9.2809 - 6 9.3695 9.4589 9.5589 9.5491 9.6402 9.7321 9.6249 9.9185 1.0013 - 5	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE V.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Alti	tude	Accel. due to	Specific weight	Pressure scale	A	Particle speed	Collision frequency	Mean free	Molecular weight
H, ft	Z, fi	gravity g, fit sec ⁻²	weight ယူ့ b ft ⁻² sec ⁻²	height H _P , ft	n, ft ⁻³	∇, ft sec ⁻¹		L, ft	M
91000 91200 91400 91600 91800 92000 92200 92400 92600	91399 91601 91802 92004 92206 92408 92609 92811 93013 93215	31.894 31.893 31.893 31.892 31.891	5.1039 - 2 5.0553 5.0071 4.9595 4.9123 4.8655 4.8192 4.7280 4.6831	21738. 21744. 21751. 21757. 21763. 21770. 21776. 21782. 21789. 21795.	1.5093 +22 1.4950 1.4957 1.4667 1.4527 1.4527 1.4390 1.4253 1.4118 1.3964 1.3851	1328.7 1328.9 1329.1 1329.3 1329.4 1329.6 1329.8 1320.0 1330.2 1330.3	1.2777 + 8 1.2657 1.2539 1.2421 1.2305 1.2190 1.2076 1.1963 1.1851 1.1740	1.0399 - 5 1.0499 1.0600 1.0701 1.0604 1.0908 1.1012 1.1118 1.1224 1.1332	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
93000 93200 93400 93600 93800 94000 94200 94400 94800 94800	93417 93618 93820 94022 94224 94426 94627 94829 95031 95233	31.888 31.887 31.886 31.885 31.885 31.885 31.883 31.883 31.883	4.6386 - 2 4.5945 4.55509 4.5077 4.4047 4.4225 4.3806 4.3390 4.2571	21801. 21808. 21814. 21820. 21827. 21833. 21839. 21846. 21852. 21858.	1.37.20 +22 1.35.90 1.34.61 1.33.33 1.32.07 1.30.82 1.29.58 1.28.35 1.27.14 1.25.94	1330.5 1330.7 1330.9 1331.1 1331.4 1331.6 1331.6 1331.8 1332.0	1.1630 + 8 1.1522 1.1414 1.1307 1.1202 1.1097 1.0994 1.0891 1.0789 1.0689	1.1440 - 5 1.1550 1.1660 1.1772 1.1884 1.1998 1.2113 1.2228 1.2345 1.2463	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
95000 95200 95400 95400 95800 96000 96200 96400 96400 96800	95435 95637 95838 96040 96242 96444 96646 96848 97050 97251	31.882 31.881 31.880 31.879 31.878 31.878 31.877 31.877	4.2168 - 2 4.1768 4.1373 4.0981 4.0593 4.0209 3.9828 3.9452 3.9079 3.8709	21865. 21871. 21877. 21884. 21690. 21896. 21903. 21909. 21915. 21922.	1.2475 +22 1.2357 1.2240 1.2124 1.2010 1.1896 1.1784 1.1673 1.1562 1.1453	1332.3 1332.5 1332.7 1332.9 1333.0 1333.2 1333.4 1333.6 1333.8	1.0589 + 8 1.0490 1.0393 1.0296 1.0200 1.0105 1.0011 9.9177 + 7 9.8254 9.7340	1.2582 - 5 1.2702 1.2823 1.2946 1.3069 1.3194 1.3320 1.3447 1.3575	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
97000 97200 97400 97600 97600 98000 98200 98400 98600	97453 97655 97857 98857 98261 98463 98665 98667 99068 99270	31.875 31.875 31.874 31.874 31.873 31.872 31.872 31.871 31.871	3.83%3 - 2 3.7081 3.7622 3.7267 3.6915 3.6567 3.6522 3.5580 3.5582 3.5592	21928. 21934. 21941. 21947. 21953. 21960. 21966. 21972. 21979. 21985.	1.1345 +22 1.1238 1.1132 1.1027 1.0924 1.0821 1.0719 1.0618 1.0518 1.0419	1334.1 1334.3 1334.5 1334.7 1334.8 1335.0 1335.2 1335.4 1335.6	9.6435 + 7 9.5539 9.4651 9.3771 9.2900 9.2038 9.1183 9.0337 8.9499 8.8668	1.3834 - 5 1.3966 1.4099 1.4233 1.4369 1.4505 1.4603 1.4782 1.4782 1.4923	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
99000 99200 99400 99600 99800 100000 100200 100400 100600 100800	99472 99674 99876 100078 100280 100482 100684 1010886 101088	31.869 31.869 31.868 31.867 31.867 31.866 31.866 31.865	3.4875 - 2 3.4546 3.4221 3.3898 3.3579 3.3263 3.2950 3.2640 3.2333 3.2029	21991. 21998. 22004. 22010. 22017. 22023. 22029. 22036. 22042. 22048.	1.0321 +22 1.0224 1.0128 1.0033 9.9383 +21 9.8449 9.7525 9.6609 9.5702 9.4804	1335.9 1336.1 1336.3 1336.5 1336.6 1336.8 1337.0 1337.2 1337.4 1337.5	8.7846 + 7 8.7032 8.6225 8.5426 8.4635 8.3851 8.3851 8.3074 8.2306 8.1544 8.0789	1.5208 - 5 1.5352 1.5498 1.5645 1.5793 1.5793 1.6094 1.6247 1.64400 1.6556	28-964 28-964 28-964 28-964 28-964 28-964 26-964 28-964 28-964
10,1000 101200 101400 101600 101800 102000 102200 102400 102600 102800	101492 101694 101895 102097 102299 102501 102703 102905 103107 103309	31.863 31.863 31.862 31.861 31.861 31.859 31.859 31.859 31.858	3.1728 - 2 3.1430 3.1134 3.0842 3.0552 3.0225 2.9981 2.9700 2.9421 2.9145	22055. 22061. 22067. 22074. 22080. 22083. 22093. 22099. 22105. 22112.	9.3915 +21 9.3034 9.2162 9.1298 9.0442 8.95595 8.8755 8.77924 8.7101 8.6286	1337.7 1337.9 1338.1 1338.3 1338.4 1338.6 1338.6 1339.0 1339.2	8.0042 + 7 7.9362 7.8569 7.7843 7.7124 7.64FT 7.5706 7.5007 7.4315 7.3629	1.6713 - 5 1.6871 1.7031 1.7192 1.735k 1.7519 1.768k 1.7851 1.8020 1.8190	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
103000 103200 103400 103600 103800 104000 104200 104400 104600 104800	103511 103713 103915 104117 104319 104521 104723 104925 105127 105329	31.857 31.856 31.855 31.855 31.855 31.855 31.853 31.853 31.853	2.8872 - 2 2.8801 2.8333 2.8068 2.7555 2.7545 2.7287 2.7032 2.6779 2.6528	22118. 22124. 22137. 22137. 22143. 22150. 22162. 22162. 22169. 22175.	8.5478 +21 8.4679 8.3887 8.3103 8.2326 8.1557 8.0795 8.0040 7.9293 7.8553	1339.5 1339.7 1339.9 1340.0 1340.2 1340.4 1340.6 1340.8 1340.9	7.2950 + 7 7.2277 7.1611 7.0951 7.0297 6.9649 6.9008 6.8372 6.7743 6.7120	1.8362 - 5 1.8535 1.8710 4.88887 1.9065 1.9245 1.9427 1.9610 1.9795	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
105000 105500 106000 106500 107000 107500 108000 108500 109500	105531 106036 106542 107047 107552 108057 108562 109067 109573	31.851 31.849 31.846 31.845 31.845 31.843 31.842 31.840 31.839 31.837	2.6279 - 2 2.5639 2.5016 2.4409 2.3817 2.3281 2.2280 2.2134 2.1602 2.1083	22182. 22225. 22267. 22310. 22352. 22355. 22437. 22479. 22522. 22564.	7.7817 +21 7.5925 7.4083 7.2288 7.0540 6.8838 6.7180 6.55564 6.3990 6.2457	1341.3 1342.6 1343.8 1345.1 1346.3 1347.6 1348.8 1350.1 1351.3 1352.5	6.6501 + 7 6.4945 6.3428 6.1949 6.0507 5.9101 5.7731 5.6395 5.5092	2.0170 - 5 2.0673 2.1187 2.17:13 2.2251 2.2801 2.3364 2.3939 2.4528 2.5130	28. 964 28. 964 28. 964 28. 964 28. 964 28. 964 28. 964 28. 965

Altii	rude	Accel.		Pressure scale height	Number density	Particle speed	frequency	Mean free path	Molecular weight
Z, ft	H, ft	gravity g, ft sec ⁻²	ω, lb ft ⁻² sec ⁻²	H _P , ft	n, ft ^{-s}	⊽, ft sec⁻'	$ u$, sec $^{-1}$	L, ft	М
91000 91200 91400 91600 91800 92000 92400	90605 90803 91001 91199 91398 91596 91794	31.895 31.594 31.894 31.893 31.893 31.892 31.891	5.2014 - 2 5.1523 5.1036 5.0554 5.0077 4.9604 4.9136 4.8673	21726. 21732. 21738. 21744. 21751. 21757. 21763. 21770.	1.5381 +22 1.5236 1.5092 1.4950 1.4809 1.4670 1.4532 1.4395	1328.4 1328.5 1328.7 1328.7 1329.1 1329.3 1329.4 1329.6	1.3017 + 8 1.2396 1.2776 1.2658 1.2540 1.2424 1.2308 1.2194	1.0205 - 5 1.0302 1.0400 1.0499 1.0599 1.0699 1.0801 1.0904	28.964 28.964 28.964 28.964 28.964 28.964 28.964
92600 92800	91992 92191 92389	31.890 31.890	4.8214 4.7759	21776. 21782.	1.4259	1329.8 1330.0	1.2081 1.1969	1.1007	28.964 28.964
93000 93200 93400 93600 93600 94000 94200 94400 94600 94800	92587 92785 92984 93182 93380 93578 93776 93975 94173 94371	31.889 31.888 31.887 31.887 31.887 31.885 31.885 31.885 31.885	4.7309 - 2 4.6864 4.6422 4.5985 4.5552 4.5124 4.4699 4.4279 4.3863 4.3450	21788. 21795. 21801. 21807. 218.13. 21920. 21826. 21832. 21838. 21845.	1.3992 +22 1.3861 1.3730 1.3601 1.3474 1.3347 1.3222 1.3098 1.2975	1330.2 1330.3 1330.5 1330.7 1331.0 1331.2 1331.4 1331.6 1331.8	1.1858 + 8 1.1748 1.1639 1.1531 1.1425 1.1319 1.1214 1.1110 1.1008 1.0906	1.1217 - 5 1.132k 1.1451 1.1540 1.1649 1.1760 1.1871 1.1903 1.2097	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
95000 95200 95400 95600 95800 96000 96200 96400 96600 96800	94569 94767 94966 95164 95362 95560 95758 95956 96155 96353	31.883 31.882 31.882 31.880 31.880 31.879 31.879 31.879 31.879	4.3042 - 2 4.2638 4.2237 4.1841 4.1448 4.1059 4.0674 5.0292 3.9915 3.9940	21851. 21857. 21864. 21870. 21876. 21882. 21889. 21895. 21901.	1.2733 +22 1.2613 1.2495 1.2378 1.2262 1.2147 1.2033 1.1921 1.1809 1.1699	1331.9 1332.1 1332.3 1332.5 1332.7 1332.8 1333.0 1333.2 1333.4 1333.5	1.0805 + 8 1.0705 1.0606 1.0508 1.0511 1.0315 1.0220 1.0126 1.0032 9.9396 + 7	1.2327 - 5 1.2444 1.2552 1.2680 1.2800 1.2921 1.3043 2.3.3167 1.3291	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
97000 97200 97400 97400 97800 98000 98200 98400 98600 98800	96551 96749 96947 97145 97343 97542 97740 97938 98136 98334	31.877 31.876 31.876 31.875 31.874 31.874 31.873 31.873 31.872	3.9170 - 2 3.8803 3.8440 3.8080 3.7723 3.7370 3.7021 3.6675 3.6332 3.5992	21914. 21920. 21926. 21933. 21939. 21945. 21951. 21958. 21964. 21970.	1.1589 +22 1.1481 1.1374 1.1268 1.1162 1.1058 1.0955 1.0955 1.0853 1.0751	1333.7 1333.9 1334.1 1334.4 1334.6 1335.0 1335.1 1335.1	9.8480 + 7 9.7572 9.6673 9.5783 9.4901 9.4627 9.3162 9.2305 9.1456 9.0615	1.3543 - 5 1.3671 1.3800 1.3930 1.4061 1.4194 1.4328 1.4463 1.4599	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
99000 99200 99400 99600 99800 100000 100200 100400 100600 100800	98532 98730 98928 99127 99325 99523 9972.1 99919 100117	31.871 31.869 31.869 31.868 31.868 31.867 31.866 31.866 31.866	3.5656 - 2 3.5323 3.4993 3.4666 3.4343 3.4022 3.3705 3.3391 3.3079 3.2771	21976. 21983. 21989. 21995. 22002. 22008. 22014. 22020. 22027. 22033.	1.0552 +22 1.0453 1.0356 1.0259 1.0164 1.0069 9.9755 +21 9.8827 9.7908 9.6997	1335.5 1335.7 1335.9 1336.0 1336.2 1336.4 1336.6 1336.7 1336.9 1337.1	8.9782 + 7 8.8957 8.8140 8.7330 8.6528 8.5734 8.4947 8.4168 8.3396 8.2631	1.4875 - 5 1.5015 1.5156 1.5299 1.5443 1.5588 1.5734 1.5782 1.6031 1.6182	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
10 1000 10 1200 10 1400 10 1600 10 1800 10 2000 10 2200 10 2400 10 2600 10 2800	100513 100711 100909 101107 101305 101504 101702 101900 102098 102296	31.865 31.864 31.863 31.863 31.862 31.862 31.860 31.860 31.860	3.2466 - 2 3.2163 3.1864 3.1567 3.1274 3.0983 3.0694 3.0409 3.0126 2.9846	22039. 22046. 22052. 22058. 22064. 22071. 22077. 22083. 22089. 22096.	9.6095 +21 9.5202 9.4317 9.3441 9.2573 9.1713 9.0862 9.0019 8.9184 8.8357	1337.3 1337.5 1337.6 1337.8 1338.0 1338.2 1338.3 1338.5 1338.7 1338.7	8.1874 + 7 8.1123 8.0380 7.9644 7.8915 7.8192 7.7477 7.6768 7.6066 7.5370	1.6333 - 5 1.6487 1.6641 1.6797 1.6955 1.7114 1.7274 1.7436 1.7599	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
103000 103200 103400 103600 104000 104000 104400 104600 104800	102494 102692 102890 103088 103286 103484 103682 103880 104078 104276	31.859 31.858 31.857 31.856 31.856 31.855 31.855 31.854 31.854	2.9569 - 2 2.9294 2.9022 2.8753 2.88486 2.8222 2.7960 2.7701 2.7444 2.7190	22102. 22108. 22115. 22121. 22127. 22133. 22140. 22146. 22152. 22158.	8.7537 +21 8.6726 8.5922 6.5126 8.4338 8.3557 8.2784 8.2018 8.1259 8.0507	1339.1 1339.2 1339.4 1339.6 1339.8 1339.9 1340.1 1340.3 1340.5	7.4681 + 7 7.3999 7.3323 7.2653 7.1990 7.1333 7.0682 7.0037 6.9398 6.8766	1.7930 - 5 1.8098 1.8247 1.8438 1.8610 1.8784 1.8960 1.9137 1.9316	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
105000 105500 106000 106500 107500 107500 108500 108500 109000	104474 104969 105464 105959 106454 106949 107444 107938 108433 108928	31.852 31.851 31.859 31.848 31.846 31.845 31.843 31.842 31.840 31.839	2.6938 - 2 2.6318 2.5685 2.5086 2.4464 2.3877 2.3306 2.2749 2.2206 2.1677	22165. 22180. 22222. 22264. 22306. 22348. 22390. 22432. 22474. 22516.	7.9763 +21 7.7933 7.6060 7.4233 7.2452 7.0718 6.9028 6.7382 6.5778 6.4215	1340.8 1341.3 1342.5 1343.7 1345.0 1346.2 1347.4 1349.7 1349.9	6.8139 + 7 6.6598 6.5056 6.3551 6.2084 6.0653 5.9258 5.7898 5.6571 5.5277	1.9678 - 5 2.0140 2.0636 2.1144 2.1663 2.2195 2.2738 2.3294 2.3862 2.4443	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE T.-Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude	Accel.	Specific	Pressure scale	Number	Particle	Collision		Molecular
ੁH, ft	Z, ft	gravity a ft sec ⁻²	Specific weight ω, lb ft ⁻² sec ⁻²	height H _e , ft	density n, ft ⁻³	speed ∇, ft sec⁻¹	frequency ν , sec ⁻¹	path L, fit	weight M
110000	110583	31.835	2.0578 - 2	22607.	6.0964 +21	1353.8	5.2582 + 7	2-5746 - 5	28.964
110500 111000	111089 111594	31.834 31.832	2.0086 1.9606	22649. 22692.	5.9508 5.8090	1355.0 1356.3	5.1374 5.0195	2.6376	28.964
111500	112099	31.831	1.9139	22735.	5.6708	1357.5	4.9046	2.7678	28.964
112000	112605	31.829	1.8683	22777.	5.5362	1358.7	4.7925	2.8351	28.964
112500	113310	31.828	1.8240 1.7807	22820.	5.4050	1360.0	4.6832	2.9039	28-964
113000 113500	113616 114121	31.826 31.825	1.7386	22862. 22905.	5.2771 5.1525	1361.2	4.5765 4.4725	3.0462	28.964
114000	114627	31.823	1.6975	22747.	5.0310	1363.7	4.3710	3.1198	28.964
114500	115132	31.822	1.6575	22990.	4.9126	1364.9	4.2720	3-1950	28.964
115000 115500	115638	31.820	1.6185 - 2 1.5805	23032. 23075.	4.7972 +21 4.6847	1366.1 1367.3	4.1755 + 7 4.0812	3.2718 - 5 3.3504	28.964 28.964
116000	116649	31.817	1.5434	23117.	4.5751	1368.6	3.9892	3.4307	28,964
116500	117155	31.816	1.5073	23160.	4.4682	1369.6	3.8995	3.5128	28.964
117000 117500	117660 118166	31.814	1.4720 1.4377	23202	4.3640 4.2624	1371.0	3.8120 3.7265	3.5966 3.6824	28.964
118000	118672	31.811	1.4042	23245. 23288.	4.1633	1372.3 1373.5	3.6432	3.7700	28.964
118500	119177	31.809	1.3716	23330.	4.0667	1374.7	3.5618	3.8596	28.964
119000	119583	31.808	1.3397	23373. 23415.	3.9725 3.8807	1375.9 1377.1	3.4824 3.4049	3.9511	28.964
						ļ.			
120000 120500	120695 121200	31.805	1.2784 - 2 1.2489	23458. 23500.	3.7911 +21 3.7038	1378.4	3.3293 + 7 3.2554	4.1401 - 5 4.2378	28.964
121000	121706	31.802	1.2201	23543.	3.6186	1380.8	3.1834	4.3375	28.964
121500 122000	122212 122718	31.800 31.799	1.1921 1.1647	23543. 23586. 23628.	3.5355 3.4545	1382.0 1383.2	3.1130 3.0443	4.4394 4.5436	28.964 28.964
122500	123224	31.797	1.1380	23671	3.3754	1384.4	2.9773	4.6500	28.964
123000	123730 124236	31.796 31.794	1.1119	23671. 23714.	3.2983 3.2231	1385.6	2.9118	4.7587	28.964
123500 124000	124236	31.794	1.0865	23756. 23799.	3.2231 3.1498	1386.9	2.8479	4.8697 4.9831	28.964
124500	1247 <u>42</u> 125248	31.793	1.0617	23841.	3.0782	1388.1 1389.3	2.7855 2.7246	5.09.90	28.964
125000	125754	31.789	1.0140 - 2	23884.	3.0084 +21	1390.5	2.6651 + 7	5.2173 - 5	28.964
125500	126260	31.788	9.9098 - 3	239.27	2.9403	1391.7	2.6070	5.3382	28.964
126000	126766	31.786	9.6853	23969. 24012.	2.8738	1392.9	2.5503	5.4617	28-964
126500 127000	127272 127778	31.785 31.783	9.4663	24055.	2.8089 2.7457	1394.1 1395.3	2.4949 2.4408	5=5878 5-7165	28.964
127500	128284	31.782 31.780	9.0440	24097.	2.6839	1396.5	2.3880	5.8481	28.964
128000	128791	31.780	8-8406	24140.	2.6236	1397.7	2.3364	5.9824	28.964
128500 129000	129297 129803	31.779	8.6420 8.4482	24182. 24225.	2.5648 2.5075	1398.9 1400.1	2.2860 2.2367	6.1195	28.964
129500	130309	31.776	8.2591	24268.	2.4514	1401.3	2.1886	6.4026	28.964
130000	130816	31.774	8.0745 - 3	24310.	2.3968 +21	1402.5	2.1417 + 7	6.5487 - 5	28.964
130500	131322	31.773	7.8944	24353. 24396.	2.3434	1403.7	2.0958	6.6978 6.8500	28.964
131000 131500	131828	31.771	7.7186 7.5470	24438.	2.2913	1404.9	2.0509	7.0054	28.964
132000	132335 132841 133347	31.768	7.3794	24481.	2.1909	1407.3	1.9643	7.1641	28.96
132500	133347	31.765	7.2159	24524.	2.1424	1408.5	1.9225	7.3261	28.964
133000 133500	133854 134360	31.765	7.0563 6.9004	24567. 24609.	2.0951 2.0490	1409.7	1.8817	7.4915 7.6603	28.964
134000	134867	31.762	6.7483	24652.	2.0039	1412.0	1.8028	7.8327	28.964
134500	135373	31.760	6.5997	24695.	1.9599	1413.2	1.7646	8.0086	28.964
135000 135500	.135880 136386	31.759 31.757	6.4547 - 3 6.3131	24737. 24780.	1.9169 +21	1414.4	1.7274 + 7	8.1882 - 5. 8.3714	28.964 28.964
135500	136893	31.756	6.1748	24823.	1.8339	1416.8	1.6554	9.5585	28.964
136500	137399	31.754	6.0397	24866.	1.7939	1418.0	1.6207	8.7494	28.964
137000	137906	31.753	5.9079	24908.	1.7548	1419.2	1.5867	8.9443 9.1431	28.964
137500 138000	138413 138919	31.751	5.7791 5.6534 5.5305	24951. 24994.	1.6794	1421.5	1.5867 1.5535 1.5210 1.4893	9.3460	28.964
138500	139426	31.748	5.5305	25036.	1-6430	1421.5	1-4893	9.5531	28.964
139000 139500	139933 140440	31.747	5.4106 5.2934	25079. 25122.	1:6074	1423.9 1425.1	1.4582	9.7644	28.964 28.964
140000	140946	31.743	5.1790 - 3	25165.	1.5388 +21	1426.2	1.3983 + 7	1.0200 - 4	28.964
140500	141453	31.742	5.0672	25207.	1.5056	1427.4	1.3693	1.0425	28.964
141000	141960	31.740	4.9580	25250.	1.4733	1428.6	1.3409	1.0654	28.964
141500	142467	31.739	4.8514	25293.	1.4416	1429-8	1.3132	1.0887	28.964
142000 142500	142974 143480	31.737	4.7472 4.6454	25336. 25378.	1.4107	1430.9	1.2861	1.1126	28.964
143000	143987	31.734	4.5459	25421.	1.3511	1433.3	1.2338	1.1617	28.964
143500	144494	31.733	4.4488	25464.	1.3223	1434.5	1.2084	1.1870	28.964
144000 144500	145001 145508	31.731 31.730	4.3538 4.2611	25507. 25550.	1.2941	1435.6	1.1837 1.1594	1.2129	28.964
145000	146015	31.728	4.1704 - 3	25592.	1.2397 +23	1438.0	1.1358 + 7	1.2661 - 4	28.964
145500	146522	31.727	4.0818	25635.	1.2134	1439.1	1.1126	1.2935	28.964
146000	147029	31.725	3.9953	25678.	1.1878	1440.3	1.0899	1.3214	28.964
146500 147000	147537 148044	31.724	3.9107 3.8281	25721.	1.1627	1441.5	1.0678	1-3500	28.964
147500	148551	31.720	3.7473	25806	1.1142	1443.8	1.0249	1.4087	28.964
148000	149058	31719	3.6683	25849.	1.0908	1445.0	1.0042	1-4390	28.964
148500	149565	31.717	3.5912	25892.	1.0679	1445.1	9.8388 + 6	1.4698	28.964
149000° 149500	150072 150580	31.716	3.5157	25935	1.0455	1447.3	9.6404	1.5333	28.964
					'*****	1	1	1	1

Altitu		Accel. due to	Specific weight	Pressure scale height	Number density	Particle speed	Collision frequency	Mean free path	Molecular weight
Z,-ff	H, #	g, ft sec-2	weight ω, lb ft sec²	H _p , ft	n, ft ⁻⁸	∇, ft sec⁻¹	ν , sec ⁻¹	L, ft	M
110000 110500 111000 111500 112000 112500 113000 113500 114000 114500	109423 109918 110412 110907 111402 111896 242391 112886 113380 113875	31.837 31.836 31.834 31.833 31.831 31.830 31.828 31.827 31.825 31.825	2.1162 - 2 2.0660 2.0171 1.9694 1.9230 1.8777 1.8335 1.77905 1.7486 1.7077	22558. 22600. 22682. 22684. 22786. 22768. 22810. 22852. 22894. 22936.	6.2691 +21 6.1207 5.7761 5.6977 5.56977 5.5638 5.4333 5.3061 5.1821	1352.3 1533.6 1354.8 1356.0 1357.2 1358.5 1359.7 1360.9 1362.1 1363.4	5.4015 + 7 5.2784 5.1584 5.0412 4.9270 4.8155 4.7068 4.6007 4.4972 4.3962	2.5036 - 5 2.5643 2.6264 2.6899 2.7547 2.8210 2.8888 2.9581 3.0288 3.1012	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
115000 115500 116500 116500 117000 117500 118500 119500	114369 114864 115358 115653 116347 116842 117336 117830 11830	31.822 31.821 31.819 31.818 31.816 31.815 31.813 31.811 31.810	1.6679 - 2: 1.6290 1.5911 1.5542 1.5182 1.4831 1.4489 1.4155 1.3829 1.3512	22979. 23021. 23063. 23105. 23147. 23189. 23231. 23273. 23315.	4.9433 +21 4.8284 4.7163 4.5006 4.5006 4.3967 4.2954 4.1966 4.1003 4.0063	1364.6 1365.8 1367.0 1368.2 1369.4 1370.6 1371.9 1373.1 1374.3 1375.5	4.2977 + 7 4.2015 4.1077 4.0161: 5.9267 3.8395 3.7543: 3.6712 3.5901: 3.5109	3.1751 - 5 3.2507 3.3279 3.4069 3.4875 3.5699 3.6591 3.7401 3.8279	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
120000 120500 121000 121500 122500 122500 123500 124000 124500	119313 119808 120302 120796 121290 121785 122279 122773 123267 123761	31.807 31.805 31.804 31.802 31.801 31.799 31.796 31.796 31.795 31.795	1.3202 - 2 1.2900 1.2605 1.2318 1.2037 1.1764 1.1497 1.1237 1.0983 1.0735	23399. 2342. 23484. 23526. 23568. 23610. 23652. 23694. 23778.	3.9147 +21 3.8253 3.7381 3.6530 3.5701 3.4891 3.4102 3.3331 3.2579 3.1846	1376.7 1377.9 1379.1 1380.3 1381.5 1382.7 1383.9 1385.1 1386.3 1387.5	3,4336 + 7 3,3581 3,2845 3,2125 3,1423 3,0737 3,0068 2,9414 2,8775 2,8152	4-0094 - 5- 4-1031 4-1998 4-2966 4-3965 4-964 4-6026 4-7090 4-8177 4-9286	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
125000 125500 124600 124600 127500 127500 128500 128500 129500	124255 124749 125243 125737 126231 126725 127219 127713 128207 128701	31.792 31.790 31.789 31.787 31.786 31.784 31.783 31.781 31.780	1.0493 - 2 1.0257 1.0027 9.8026 - 3 9.5833 9.3694 9.1506 8.9568 8.7578 8.5636	23820. 23863. 23905. 23947. 23989. 24031. 24073. 24115. 24157. 24200.	3.1130 +21 3.0432 2.9750 2.9785 2.8436 2.8436 2.7184 2.6581 2.5991 2.5416	1388.7 1389.9 1391.1 1392.3 1393.5 1394.6 1395.8 1397.0 1398.2 1399.4	2.7543 + 7 2.6948 2.6367 2.5800 2.5245 2.4704 2.4175 2.3658 2.3154 2.2661	5.0419 - S 5.1576 5.2758 5.3965 5.5196 5.6454 5.7738 5.9049 6.0388 6.1754	28-964 28-964 28-964 28-964 28-964 28-964 28-964 28-964 28-964
130000 130500 131000 131500 132500 132500 133500 133500 134500	129195 129688 130182 130676 131170 131663 132157 132651 133144 133638	31.777 31.775 31.774 31.772 31.771 31.769 31.768 31.766 31.764 31.764	8.3741 - 3 8.1890 8.084 7.8320 7.6599 7.4918 7.3276 7.1674 7.0109 6.8580	2%242. 2%284. 2%326. 2%368. 2%450. 2%452. 2%452. 2%537. 2%579. 2%621.	2.4855 +21 2.4307 2.3772 2.3249 2.2739 2.2241 2.1755 2.1280 2.0817 2.0364	1400.6 1401.8 1402.9 1404.1 1405.3 1406.5 1407.7 1408.8 1410.0 1411.2	2.2179 + 7 2.1708 2.1248 2.0799 2.0360 1.9930 1.9951 1.9101 1.8701 1.8309	6.3149 - 5 6.4573 6.6026 6.7510 6.9024 7.0569 7.2147 7.3756 7.5399 7.7076	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
135000 135500 136000 136500 137500 137500 138000 138500 139500	134332 134625 135119 135612 136106 136599 137093 137586 138080 138573	31.761 31.760 31.758 31.757 31.755 31.755 31.754 31.751 31.749 31.748	6.7088 ÷ 3 6.5631 6.4207 6.2817 6.1459 6.0133 5.8838 5.7572 5.6336 5.5129	24663. 24705. 24747. 24790. 24832. 24874. 24916. 24958. 25000. 25043.	1.9922 +21 1.9490 1.9068 1.8656 1.8254 1.7477 1.7102 1.6735 1.6377	1412.4 1413.5 1414.7 1415.9 1417.0 1418.2 1419.4 1420.5 1421.7 1422.9	1.7926 + 7 1.7552 1.7187 1.6829 1.6480 1.6138 1.5805 1.5478 1.5159 1.4847	7.8786 - 5 8.0532 8.2313 8.4131 8.5986 8.7878 8.9808 9.1778 9.3787 9.5837	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
14000 14050 141000 141500 14200 142500 143500 143500 144500	139066 139560 140053 140546 141040 141533 142026 142519 143012 143506	31.746 31.745 31.743 31.742 31.740 31.739 31.737 31.736 31.734 31.733	5.3949 - 3 5.2796 5.10570 5.0570 4.9495 4.8445 4.7418 4.6415 4.5435 4.4477	25085. 25127. 25169. 25211. 25254. 25296. 25338. 25380. 25422. 25464.	1.6028 +21 1.5686 T.5352 1.5026 1.4707 1.4396 1.4092 1.3794 1.3503 1.3219	1424.0 1425.2 1426.4 1427.5 1428.7 1429.8 1431.0 1432.2 1433.3	1.4542 + 7 1.4243 1.3952 1.3666 1.3387 1.3114 1.2847 1.2586 1.2331 1.2082	9.7928 - 5 1.0006 - 4 1.0224 1.0446 1.0672 1.0903 1.1138 1.1379 1.1623 1.1873	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
145000 145500 146000 146500 147500 147500 148500 149500 149500	143999 14492 144985 145478 145971 146464 146957 147450 147943 148436	31.731 31.730 31.728 31.727 31.725 31.724 31.722 31.721 31.719	4.3541 - 3 4.2626 4.1731 4.0857 4.0003 3.9167 3.8351 3.7553 3.6773 3.6010	25507. 25549. 25591. 25633. 25675. 25718. 25760. 25802. 25844. 25887.	1-2942 +21 1-2670 1-2405 1-2146 1-1845 1-1645 1-1402 1-1.166 1-0934 1-0708	1435.6 1436.8 1437.9 1439.1 1440.2 1441.4 1442.5 1443.7 1444.8	1.1837 + 7 1.1598 1.1365 1.1136 1.0912 1.0694 1.0480 1.0270 1.0065 9.8646 + 6	1-2128 - 4 1-2388 1-2653 1-2923 1-3198 1-3198 1-3765 1-4057	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE V.-Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

		A = ==!	QEOI OTEN	Pressure					T
Aitit	rude	Accel.	Specific Weight	scale	Number density	Particle speed	Collision frequency	Mean free path	Molecular weight
11, 44	Z, ft	gravity	// lb.f+"2 eac2	height	n, ft	∇, ft sec 1		Ŀ, iff	M
H, ft	Z _p 11	g, ft sec-2	weight ω, lb f.t ⁻² sec ⁻²	H _P , ft	, 11 ₉ , 4-1	V, 11 300	, 3cc	L, 1,	ļ
150000	151087	31.713	3.3700 - 3	26020.	1.0022 +21	1449.5	9.2563 + 6	1.5661 - 4	28.964
150500 151000	151594 15210 i	31.711	3/2995	26063. 26106.	9.8134 +20 9.6091	1450.7	9.0705 8.8887	1.5994	28.964
151500	152609	31.708	3.2307 3.1633	26149.	9.4093	1453.1	8.7109	1.6681	28.964
152000	153116	31.707 31.705	3.0975	26192.	9-2140	1454.2	R.5368	1.7035	28.964
152500	153623	31.705	3.0332	26235.	9.0230	1455.4	8.3665	1.6681 1.7035 1.7395 1.7763	28.964
153000 153500	154131 154638	31.704 31.702	2.9703 2.9088 2.8486	26278. 26320.	8.8363 8.6538	1456.5 1457.7 1458.8	8.3665 8.1999 8.0369 7.8773	1.8137	28.964 28.964
154000	155146	31.701	2.8486	26363.	8.4753	1458.8	7.8773	1.8519	28.964
154500	155653	31.699	2.7925	26381.	8.3085	1459.3	1.1248	1.8891	28.964
155000 155500	156161	31.698 31.696 31.694 31.693 31.691 31.690 31.688	2.7391 - 3	26382. 26384. 26385.	8.1502 +20 7.9949	1459.3 1459.3 1459.3 1459.3 1459.3	7.5776 + 6 7.4332 7.2916	1.9258 - 4	28.964 28.964
156000	156668 157176	31.694	2.6868 2.6355	26385.	7-8426	1459.3	7.2916	2.0013	28.964
156500 157000	157683	31.693	2.5851 2.5358	26386.	7-6932	1459.3	7.1526 7.0164	2.0402	28.964
157500	158191 158699	31.690	2.5558	26388. 26389.	7.5466 7.4028	1459.3	A-8827	2.1202	28.964
158000	159206 159714 160222	31.688	2.4873 2.4398	26390.	7.2618	1459.3 1459.3	6.8827 6.7515	2.1614	28.964
158500 159000	159714	31001	2.3932	26391.	7.1234	1459.3	6.6229	2.2034	28.964
159500	160729	31.685 31.684	2.3475 2.3027	26393. 26394.	6.9877 6.8546	1459.3 1459.3	6.3729	2.2462 2.2898	28.964 28.964
160000	161237	31.682	2.2587 - 3	26395.	6.7239 +20	1459.3	6.2515 + 6	2.3343 - 4	26.964
160500 161000	161745 162253	31.681	2.2155 2.1732	26396. 26398.	6.5958	1459.3	6.1324 6.0156	2.3796 2.4258	28.964
161500	162761	31.678	2.1317	26399.	6.3469	1459.3	5.9009	2.4730	28.964
162000	163268	31.676	2.0910	26400	6.2260	1459.3	5.7885	2.5210	28.964
162500 163000	163776 165284	31.675	2.0531 2.0119	26402. 26403.	6-1073 5-9910	1459.3	5.6782 5.5700	2.5700 2.6199	28.964
163500	164792	31.671	1.9735	26404.	5.8768	1459.3	5.4639	2.6708	28.964
164000° 164500	165300 165808	31.670	1.9358	26405. 26407.	5.7649 5.6550	1459.3	5.3598 5.2577	2.7226 2.7755	28.964 28.964
165000	166316	31.667	1.8625 - 3	26408.	5.5473 +20	1459.3	5.1575 + 6	2.8294 - 4	28.964
165500	166824	31.665	1.8269	26409.	5.4416	1459.3	5.0592	2.8844	28.964
166000	167332	31.664	1.7921	26410.	5.3379 5.2362	1459.3	4.9629	2.9404	28.964
166500 167000	167840 168348	31.662	1.7242	26412. 26413.	5.1364	1459.3	4.8683 4.7755	3.0557	28.964
167500	168853	31.459 31.458	1.4013	26414.	5.0386	1459.3	h_ARLS	3-1151	23.964
168000 168500	169364 169873	31.658	1.6590	26416. 26417.	4.9426	1459.3	4.5953	3-1:756 3-2373	28.964 28.964
169000	170381	31.655	1.6590 1.6273 1.5962	26418	4.7560	1459.3	4.4219	3.3002	28.964
169500	170889	31.653	1.5658	26418. 26419.	4-6654	1459.3	4.3376	3.3643	28.964
170000	17.139.7	31.652 31.650 31.649	1.5358 - 3 1.5065	26421.	4-5765 +20	1459.3 1459.3	4.2550 + 6 4.1739 4.0962 4.0203	3.4296 - 4	28.964
170500 171000	171906 172414	31.649	1.5005	26422. 26400. 26371.	4.4893 4.4077	1459.5	h-0962	3.4962	28.964
171500	172922	31.647	1.4790	26371.	1 4.3285	1457.8	4.0203	3.5610 3.6262	28.964
171500 172000 172500	173431 173939	31.645	1.4262	26343.	4.2506 4.1740	1457.0	3.9457	3-6926	28.964
173000	174447	31.647 31.645 31.644 31.642	1.3751	26314.	4.0987	1456.2 1455.3	3.8724 3.8004	3-6926 3-7603 3-8294	28.964
173500 174000	174956	1 31.041	1.3502	26286. 26257.	4.0247	1454.5	1 3.7297	3.8998 3.9716	28.964
174000 174500	175464 175973	31.639 31.638	1.3257	26229.	3.9520 3.8805	1453.7 1452.9	3.6602 3.5920	4.0448	28.964
175000	176481	31.636 31.635	1.2780 - 3	26172.	3.8102 +20	1452.0	3.5249 + 6.	4.1194 - 4	28.964
175500	176990	31.635	1.2548	26143-	3.7411	1451.2	3.4590	4.1955	28.964
176000 176500	177498 178007	31.633	1.2320	26115. 26086.	3-6732 3-6064	1450.4	3.3943 3.3307	4.2731 4.3522	28.964
177000	178515	31.630	1.1874	26058-	3-5408	1448.7	3.2682	4.4323	28.964
177500 178000	179024 179533	31.629	1.1658	26029	3-4763 3-4129	1447.9	3.2068 3.1465	4.5151 4.5990	28.964
178500	180041	31.626	1.1235	25972.	3.3505	1446.2	3.0873	4.6845	28.964
179000	180550	31.624	1.1029	25944	3.2893	1445.4	3.0291	4.7717	28.964
179500	181059	31.623		25915.	3.2291	1444.6	2.9720	4.8607	28.964
180000° 180500	181567 182076	31.621	1.0628 - 3	25887. 25858.	3.1699 +20 3.1118	1443.8	2.9158 + 6	4.9514 - 4 5.0439	28.964
181000	182585	31.618	1.0240	25830.	3.0546	1442.1	2.8066	5.1383	28.964
181500	183094 183602	31.616	1.0051	25801.	2.9985	1441.3	2.7534	5.2345	28.964
182000 182500	184111	31.613	9-8660 - 4	25772. 25744.	2-9433	1440.4	2.6498	5.3327 5.4328	28.964
183000	184620	31.612	9.5046	25715.	2.8358	1438.8	2.5994	5.5349	28.764
183500 184000	185129 185638	31.610	9.3286	25687.	2.7834	1437.9	2.5500	5.6391	28.964
184500	186147	31.607	8.9858	25630.	2.6813	1436.3	2.4536	5.8536	28.964
185000	186656	31.606	8.8188 - 4	25601°- 25573°-	2.6317 +20	1435.4	2.4068 + 6	5.9642 - 4 6.0769	28.964
185500 186000	187165 187674	31.604	8.6548	25573.	2.5348	1434.6	2.3607	6.1919	28.964 28.964
186500	188183	31.601	6.3352	25515.	2.4877	1432.9	2.2711	6.3093	28.964
167000 187500	188692 189201	31.600	8.1797	25487.	2.4414	1432.1	2.2275	6-4290	28.964
188000	189710	31.597	7.8766	25458 • 25430 •	2.3959	1430.4	2.1427	6.6757	28.964
188500	190220	31.595	7.7291	25401	2.3072	1429.6	2.1015	6.8028	23.968
	190729	31.593	7.5841	25373.	2.2641	1428.7	2.0609	6.9325	28.964
189000° 189500	191238	31.592	7.4418	25344.	2.2217	1427.9	2.0211	7.0648	28.964

TABLE X Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS

		A a a a l		Pressure	ODE, ENGL	 		[
Άltin	ude	Accel.	Specific	scale	Number	Particle	Collision		Molecular
A.		gravity	weight	height.	density n, ft ⁻³	speed	frequency ν , sec ⁻¹		weight
Z, ft	H, ft	g, ft sec 2	weight ω, lb ft ⁻² sec ⁻²	H _P , ft	n, 11 -	∇, ft sec	ν, sec	L, ft	, M. ³
150000	148929	31.716	3.5264 - 3	25929.	1:-0487 +21	1447.1	9.6684 + 6	1.4967 - 4	28.964
1,50500	149422	31.715	3.4535	25971. 26013.	1.0270	1448.2	9.4764 9.2885	1.5283	28.964 28.964
151000 151500	149914 150407	31.713	3.3822 3.3325	26055.	9.8518 +20	1450.5	9.1047	1.5932	28.964
152000	150900	31.712 31.710	3.2443	26098.	9.6495	1451.7	8.9247	1-6266	28.964
152500 153000:	151393 151886	31.709	3.1776	26140. 26182.	9.4517	1452-8	8-7487 8-5763	1.6606	28.964 28.964
153500	151393 151886 152378	31.709 31.707 31.706	3.1125 3.0487	26224.	9:0691	1455.1	8-4076	1.6953	28.964
154000 154500	152871 153364	31.704 31.703	2.9864	26267. 26309.	8.8841	1456.2 1457.4	8.2425 8.0810	1.7667	28.964
155000	153856	31.701	2.8658 - 3	26351.	8,5261 +20	1458.5	7.9228 + 6	1.8409 - 4	28.964
155500 154000	153856 154349 154842	31.700 31.698	2.8088 2.7559	26381 26382	8.3569 8.2000	1459.3	7.7698 7.6239	1.8782	28.964 28.964
156500	i. 15533¥	31.696	1 2.7040	26383	8.0461	1459.3	7.4808	1.9507	28.964
157000 1 157500	155827	31:495	2.6532	26383. 26385. 26386.	7.8951 7.7468	1459.3	7.3403	1.9880 2=0261	28.964
158000	156319 156812	31.693	2.5542	26387.	7-6014	1459.3	7.0673	2.0648	28.964
158500	157304	31.690	2.5062	26388	7.4588	1459.3	6.9347	2.1043 2.1446	28.964
159000 159500	157797 158289	31.689 31.687	2.4590 2.4128	26390. 26391.	7.3188 7.1814	1459.3	7.0673 6.9347 6.8045 6.6768	2.1856	28.964 28.964
160000	158782	31.686	2.3674 - 3	26392. 26393.	7.0466 +20 5.9144	1459.3 1459.3	6.5515 + 5 6.4286	2.2274 - 4 2.2700	28.764 28.964
160500	159274 159766	31.684 31.683	2.3228	26395.	6.7846	1459.3	6.3079	2.3334	.28.964
161500	160259 160751	31.681	2.2363	26396.	1 6.6573	1459.3	6.1896	2.3577	28.964 28.964
162000 162500	161243	31.680 31.678	2.1942 2.1529	26397. 26398.	6.5324	1459-3	6.0734 5.9595	2.4487	28.964
163000	161736	31.677	2.1124	26400.	6 • 2896.	1459.3	5.8477	2.4955	28.964
163500 164000	162228 162720	31.675 31.674	2.0727 2.0337	26401. 26402.	6.1716	1459.3	5.7380 5.6303	2.5432	28.964
164500	163212	31.672	1-9955	26403.	5.9422	1459.3	5.5247	2.6414	28.964
165000 365500	163705	31.671	1.9579 - 3	26405. 26406.	5.8307 +20 5.7214	1459.3	5.4211 + 6 5.3194	2.6919 - 4 2.7433	28.964 28.964
344000	164197 164689	31.668	1.9211	26407.	5.6141	1459.3	5.2196	2.7958	28.964
166500	165181 165673	31.666	1.8496	26408.	5.5088 5.4054	1459.3	5.1217	2.8492 2.9037	28.964 28.964
167500	1 166165	1 31-663	l 1.7807	2641.1.	5.3041	1459.3	5.0256 4.9314	2.9592	28.964
168000	166657 167149	31.662	1.7472	26412.	5-2046 5-1070	1459.3	4.8389 4.7482	3.0157 3.0734	28.964 28.964
166500 167500 167500 168500 168500 169500	167641	31.662 31.660 31.659 31.657	1.7472 1.7143 1.6821 1.6505	264 10. 264 11. 264 12. 264 13. 264 15. 264 16.	5.0112 4.9173	1459.3	4.6591 4.5718	3.1321 3.1919	28.964 28.964
170000	168625	31.656	1.6195 - 3	26417.	4.8251 +20	1459.3	4.4861 + 6	3.2529 - 4	28.964
170500	169117	31-654 31-653	1.5590	26418. 26420.	4.7346	1459.3	4.4020	3.3151	28.964
171000 171500	169609	31.653	1.5592	26420.	4.6459	1459.3	4.3194 4.2385	3.3784 3.4430	28.964 28.964
172000 172500	170593	31.650 31.648	1.5011	26422.	4.4733	1459.3	L 1500	3.5087	28.964
172500 173000	171085 171577	31.648	1.4745	26421. 26422. 26395. 26367.	4.3942	1459.3 1459.3 1458.5 1457.7	4.0832 8.0088 3.9356 3.8637	3.5719	28.964 28.964
1.73500	172068	31.645	1.4226	26339.	4.2400	1456.9	3.9356	3.7018 3.7686	28.964
174000 174500	172560 173052	31.644	1.3974	26339. 26311. 26283.	4.1649	1456.9 1456.1 1455.3	3.8637 3.7931	3.7686 3.8366	28.964 28.964
175000	173544	31.641	1.3481 - 3	26255.	4-0183 +20	185k.k	3.7236 + 6	3-9060 - 4	28.964
175500 176000	174035 174527	31.639 31.638	1.3240	26227.	3.9469 3.8767	1453.6 1452.8	3.6554	3.9767 4.0488	28.964 28.964
176500 176500	175019	31.636	1.2772	26171.	3.8076	1452.0	3.5883 3.5224	41222	28.965
177000	175510	31.635 31.633	1.2543	26143. 26115.	3.7397 3.6729	1451.2	3.4577 3.3940	4.1971 4.273h	28.964
177500 178000	176002 176493	31.632	1.2098	26087.	3.6073	1449.6	3.3315	4.2734 4.3511	28.964
170500	176985	31.630	1.1881	26059.	3.5427 3.4793	1448.8 1447.9	3.2700 3.2097	4.4304	28.964 28.964
179000 179500	177477	31.629 31.627	1.1668	26031.	3.4169	1447.1	3.1503	4.5936	28.964
180000	178460	31.626	1.1252 - 3	25974.	3.3555 +20	1446.3	3.0920 + 6 3.0348	4.6775 - 4 4.7631	28.964 28.964
180500 181000	178951	31.624	1.1049	25946. 25918.	3.2952 3.2360	1444.7	2.9785	4.8504	28.964
181500	179934	31.621	1.0654	25890.	3.1777	1443.9	2.9232	4.9393	28.964
182000 182500	180425	31.620	1.0461	25862. 25834.	3.1204 3.0641	1443.1	2.8689 2.8155	5.0300 5.1224	28,964
163000	181408	31.617	1.0086	25806.	. 3.0087	1441.4	2.7631 2.7116	5.2167 95.3128	28.964
183500 184000	181899 182391	31.615	9.9031 - 4 9.7234	25778. 25750.	2.9543	1440.6	2.6610	5.4107	28.964
184500	182882	31.612	9.5467	25722.	2.8483	1439.0	2.6113	5.5106	28.964
185000 185500	183373 183864	31.611	9.3730 - 4 9.2023	25694. 25666.	2.7966 +20	1438.1	2.5624 + 6	5.6124 - 4 5.7163	28.964
186000	184356	31.608	9.0346	25638.	2.6959	1436.5	2.4673	5.8221	28.964
186500° 187,000	184847 185338	31.606	8.8697 8.7076	25610. 25582.	2.6460	1435.7	2.4210	5.9301	28.964
187.500	165829	31.603	8.5464	25554.	2.5512	1434.0	2.3309	6.1524	1 28.964
188000 188500	186320	31.602	8.3919	25526. 25498.	2.5046	1433.2	2.2870	6.2668	28.964
789000	187302	31.599	8-0869	25470.	2.4138	1431.6	2.2016	6.5025	28.964
189500	187793	31.597	7.9383	25442.	2.3695	1430.8	2.1600	6.6239	28.964
***	l	1	1	l		<u> </u>	<u></u>	1	J

TABLE V.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altif	ude	Accel. due to	Specific weight	Pressure scale	Number density	Particle speed	Collision frequency	Mean free	Molecular weight
H, ft	Z, ft	gravity g,ft sec ⁻²	weight ω, lb ft ⁻² sec ⁻²	height H _P , ft	n, ff ⁻⁸	∇, f† sec		L, ft	M
190000 190500 191000 191000 192500 192500 193000 193500 194500	191747 192256 192766 193275 193784 194294 194803 195312 195822 196331	31.590 31.589 31.586 31.586 31.584 31.583 31.581 31.580 51.578	7.3019 - 4 7.1645 7.0295 6.8969 6.7666 6.6387 6.5131 6.3896 6.2684 6.1493	25315. 25287. 25258. 25250. 25201. 25172. 25144. 25115. 25087. 25058.	2.1800 +20 2.1391 2.0989 2.0594 2.0206 1.9825 1.9451 1.9083 1.8722 1.8367	1427.1 1426.2 1425.4 1424.5 1423.7 1422.8 1422.0 1421.2 1420.3 1419.5	1.9821 + 6 1.9437 1.9061 1.8691 1.8328 1.7972 1.7622 1.7279 1.6942	7.1997 - 4. 7.3375 7.4780 7.6214 7.7677 7.9 70: 8.0694 8.2249 8.3835 8.5454	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
195000 195500 196000 196500 197000 197500 198000 198000 199000	1948k-1 197350 197860 198369 198879 199388 199898 200408 200917 201427	31.575 31.574 31.572 31.571 31.569 31.567 31.566 31.564 31.563 31.561	6.0324 - 4. 5.9175 5.8047 5.6939 5.5851 5.4783 5.3734 5.2703 5.1691 5.0698	25029. 25001. 24972. 24944. 24915. 24886. 24886. 24829. 24800. 24772.	1.8019 +20 1.7677 1.7340 1.7010 1.6686 1.6368 1.6055 1.5748 1.5446	1418.6 1417.8 1416.9 1416.1 1415.2 1411.4 1413.5 1412.7 1411.8 1411.0	1.6286 + 6 1.5967 1.5654 1.5347 1.5046 1.4750 1.4174 1.3894 1.3620	8.7107 - 4 8.8793 9.0514 9.2271 9.4064 9.5894 9.7762 9.9668 1.0161 - 3	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
200000 200500 201000 201500 202000 202500 203500 203500 204000 204500	201937 202447 202956 203466 203976 204486 204996 205506 206015 206525	31.560 31.558 31.557 31.555 31.554 31.551 31.551 31.549 31.548	4.9722 - 4 4.8807 4.7922 4.7052 4.6194 4.5351 4.4520 4.3704 4.2109	24743. 24692. 24634. 24575. 24517. 24458. 24400. 24341. 24283. 24224.	1.4859 +20 1.4587 1.4323 1.4063 1.3808 1.3556 1.3359 1.3065 1.2825 1.2589	1410.1 1408.7 1407.0 1405.3 1403.6 1401.8 1400.1 1398.4 1396.7	1.3350 + 6, 1.3091 1.2839 1.2591 1.2347 1.2108 1.1872 1.1640 1.1413 1.1189	1.0563 - 3 1.0760 -0.0958 1.1161 1.1367 1.1578 1.1794 1.2013 1.2238 1.2467	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
205000 205500 206500 206500 207500 207500 208500 208500 209500	207035 207545 208055 208565 209075 209586 218096 211116 211626	31.545 31.543 31.541 31.540 31.538 31.537 31.535 31.535 31.534 31.532	4.1330 - 4 5.0564 3.961 3.9069 3.8350 3.7623 3.6917 3.6223 3.55540 3.4868	24166. 24107. 24049. 23990. 23932. 23614. 23756. 23697. 23639.	1.2357 +20 1.2129 1.1904 1.1683 1.1466 1.1252 1.1041 1.0834 1.0630 1.0430	1393.3 1391.5 1389.8 1388.1 1386.4 1384.6 1382.9 1381.2 1377.4	1.0969 + 6 1.0753 1.0541 1.0332 1.0127 9.9259 + 5 9.7279 9.5335 9.3424 9.1547	1.2701 - 3 1.2941 1.3185 1.3484 1.3689 1.3950 1.4216 1.4487 1.4487	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
210000 210500 211000 211500 212000 212500 213500 213500 214000 214500	212136 212647 213157 213157 214177 214688 215198 215199 216729	31.529 31.528 31.526 31.525 31.523 31.522 31.520 31.519 31.517	3.4207 - 4 3.3558 3.2919 3.2290 3.1672 3.1065 3.0467 2.9880 2.9302 2.8734	23580. 23522. 23463. 25404. 23346. 23287. 23170. 23111. 23053.	1.0233 +20 1.0039 9.8481 +19 9.6606 9.4762 9.2948 9.1165 8.9411 8.7686 8.5991	1375.9 1374.2 1372.5 1370.7 1369.0 1367.2 1365.4 1363.7 1361.9	8.9704 + 5 8.7893 8.6114 8.4366 8.2650 8.2964 7.9309 7.7683 7.6086 7.4519	1.5339 - 3 1.5635 1.5938 1.6247 1.6563 1.6886 1.7217 1.7555 1.7900 1.8253	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
215000 215500 216500 216500 217000 217500 218500 218500 219000	217240 217750 218261 218771 219282 219793 220303 220814 221324 221835	31.514 31.512 31.511 31.509 31.508 31.506 31.505 31.503 31.502	2.8175 - 4 2.7627 2.7087 2.6556 2.6035 2.5523 2.5019 2.4524 2.4037 2.3559	22994. 22935. 22877. 22818. 22759. 22701. 22642. 22583. 22524. 22466.	8.4324 +19 8.2685 8.1074 7.9490 7.7933 7.6403 7.4898 7.3490 7.1967 7.0539	1358.4 1356.6 1354.9 1353.1 1351.3 1347.8 1346.0 1344.2	7.2979 + 5 7.1468 6.9984 6.8527 6.7097 6.5693 6.4314 6.2961 6.1634 6.0330	1.9614 - 3 1.8982 1.9360 1.9745 2.0140 2.0543 2.0956 2.1378 2.1810 2.2251	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
220000 220500 221000 221500 222000 223500 223500 224000 224500	222346 222857 223367 223878 224389 224900 225411 225921 226432 226943	31.499 31.497 31.496 31.494 31.493 31.491 31.490 31.488 31.487 31.485	2.3089 - 4 2.2627 2.174 2.1728 2.1290 2.0860 2.0437 2.0022 1.9614 1.9213	22407. 22348. 22290. 22231. 22172. 22173. 22055. 21996. 21937. 21878.	6.9135 +19 6.7756 6.6401 6.5069 6.3761 6.2475 6.1212 5.9971 5.8752 5.7555	1340.6 1338.8 1337.0 1335.3 1333.5 1331.7 1329.9 1328.0 1326.2	5.9051 + 5 5.7796 5.6564 5.5355 5.4169 5.3005 5.1863 5.0743 4.9644 4.8566	2.2703 - 3 2.3165 2.3638 2.4122 2.4617 2.5123 2.5642 2.6172 2.6715 2.7271	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
225000 225500 226000 226500 227000 227590 228500 229500 229500	227454 227965 228476 228987 229498 230009 230521 231032 231543 232054	31.483 31.482 31.480 31.479 31.477 31.476 31.474 31.473 31.471	1.8820 - 4 1.8433 1.8054 1.7681 1.7315 1.6955 1.6602 1.6255 1.5915	21820. 21761. 21702. 27643. 21585. 21526. 21467. 21408. 21349. 21290.	5.6379 +19 5.5223 5.4089 5.2974 5.1880 5.0805 4.9750 4.8713 4.7696 4.6697	1322.6 1320.8 1319.0 1317.2 1315.3 1313.5 1311.7 1309.9 1308.0 1306.2	4.7508 + 5 4.6471 4.5453 4.4456 4.3477 4.2517 4.1576 4.0653 3.9748 3.8861	2.7840 - 3 2.8422 2.9018 2.9629 3.0254 3.0894 3.1549 3.2221 3.2908 3.3612	28.964 28.964 28.964 28.964 28.964 28.964 26.964 28.964 28.964

TABLE V.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

		() A		Drossiles	,	T		T	I:
Altitu	ude	Accel due to	Specific weight	Pressure scale height	Number density	Particle speed	Collision frequency	Mean free path	Molecular weight
Z, ft	H, ft	gravity g, ft sec ⁻²	weigin ω, lb ft ⁻² sec ⁻²	H _e , ft		∇, ft sec ⁻¹	ν , sec ⁻¹	L _u ft	M
190000 190500 191000 191500 192500 192500 193500 194000 194500	188264 188775 189266 189757 190248 190739 191230 191721 192212 192703	31.596 31.594 31.593 31.591 31.590 31.588 31.587 31.585 31.584	7.7924 - 4 7.6489 7.5080 7.3694 7.2333 7.0982 6.9622 6.8391 6.7122 6.5875	25413. 25385. 25357. 25329. 253273. 25273. 25245. 25217. 25189. 25161.	2-3261 +20 2-2834 2-2414 2-2002 2-1596 2-1198 2-0806 2-0422 2-0044 1-9673	1429.9 1429.1 1428.3 1427.5 1426.6 1425.8 1425.0 1424.2 1423.3 1422.5	2.1192 + 6 2.0790 2.0396 2.0010 1.9630 1.9256 1.8890 1.8530 1.8177	6.7477 - 4 6.8739 7.0026 7.1339 7.2678 7.4043 7.5436 7.6857 7.8306 7.9784	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
195000 195500 196000 196500 197000 197500 198000 198000 199000	193193 193684 194175 194666 195156 195647 196138 196628 197119 197609	31.581 31.579 31.578 31.576 31.575 31.575 31.572 31.570 31.569	6.4651 - 4 6.3447 6.2265 6.1104 5.9963 5.8842 5.7740 5.6658 5.5596 5.4552	25133. 25105. 25077. 25049. 25020. 24992. 24964. 24936. 24908. 24880.	1.9308 +20 1.8949 1.8597 1.8251 1.7911 1.7577 1.7249 1.6927 1.6610 1.6299	1421.7 1420.8 1420.0 1419.2 1418.4 1417.5 1416.7 1415.9 1415.0 1414.2	1.7489 + 6 1.7154 1.6825 1.6503 1.6186 1.5875 1.5569 1.5269 1.4975 1.4686	8:1291 - 4 8:2829 8:4398 8:5998 8:7630 8:9296 9:0094 9:2727 9:4495 9:6299	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
200000 200500 201000 201500 202000 202500 203500 204000 204500	198100 198591 199081 199572 200062 200552 201043 201533 202024 202514	31.566 31.564 31.563 31.561 31.560 31.558 31.557 31.555 31.555	5.2526 - 4 5.2519 5.1529 5.0557 4.9603 4.8714 4.7847 4.6994 4.6154 4.5327	24852. 24824. 24796. 24768. 24760. 24686. 24629. 24572. 24572. 24574.	1.5993 +20 1.5693	1413.4 1412.5 1411.7 1410.9 1408.5 1406.8 1405.1 1403.5 1401.8	1.4402 + 6 1.4123 1.3849 1.3581 1.3317 1.3065 1.2818 1.2575 1.2336 1.2101	9.8140 - 4 1.0002 - 3 1.0183 1.0389 1.0588 7.0781 1.0976 1.1174 1.1377 1.1584	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
205000 205500 206000 206500 207500 207500 208000 208500 209500	203004 203495 203985 204475 204965 205456 205456 206436 206926 206416	31.551 31.549 31.548 31.545 31.545 31.542 31.542 31.550 31.539	4.4513 - 4 4.3712 4.2924 4.2148 4.1384 4.0632 3.9892 3.9894 3.88447 3.88447	24399. 24342. 24285. 24227. 24170. 24112. 24055. 23988. 23940. 23883.	1.3307 +20 1.3068 1.2833 1.2601 1.2373 1.2149 1.1928 1.1711 1.1498 1.1287	1400.1 1398.4 1396.8 1395.1 1393.4 1391.7 1390.0 1388.3 1386.6	1.1870 + 6 1.1643 1.1420 1.1200 1.0984 1.0772 1.0359 1.0359 1.0157 9.9594 + 5	1.1795 - 3 1.2011 1.2231 1.2456 1.2685 1.2919 1.3158 1.3402 1.3651 1.3906	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
210000 210500 211000 211000 212000 212500 213500 214000 214500	207906 208396 208886 209376 209866 210356 210346 211336 211826 212316	31.536 31.534 31.533 31.533 31.530 31.527 31.525 31.525 31.524	3.7048 4 3.6366 3.5694 3.5033 3.4383 3.3743 3.3743 3.3114 3.2495 3.1886 3.1287	23825. 23768. 23711. 23653. 23596. 23536. 23481. 23424. 23366. 23309.	1.1080 +20 1.0877 1.0676 1.0479 1.0285 1.0094 9.9064 +19 9.7217 9.5400 9.3612	1383.2 1381.5 1379.8 1378.1 1376.4 1374.7 1373.0 1371.3 1369.6 1367.8	9.7648 + 5 9.5735 9.3856 9.2009 9.0193 8.8410 8.6657 8.4925 8.3243 8.1581	1.4165 - 3 1.4431 1.4701 1.4978 1.5261 1.5549 1.5844 1.6145 1.6453	28.964 28.964 28.964 28.964 28.964 28.964 28.964 26.964 28.964
215000 215500 216000 216500 217500 217500 218000 218000 219000	212806 213296 213785 214275 214765 215255 215745 216234 216724 217214	31.521 31.519 31.518 31.516 31.515 31.513 31.513 31.512 31.510 31.509	3.0698 - 4 3.0118 2.9548 2.8988 2.8437 2.7895 2.7362 2.6837 2.6332 2.5815	23251. 23194. 23136. 23079. 23021. 22904. 22907. 22849. 22792. 22734.	9.1853 +19 9.0124 8.8423 8.6749 8.5104 8.3185 8.1894 8.0329 7.8790 7.7276	1366.1 1364.4 1362.7 1361.0 1359.2 1357.5 1355.8 1355.8 1352.3 1350.6	7.9948 + 5 7.8344 7.6768 7.5220 7.3699 7.2206 7.0739 6.7298 6.7883 6.6494	1.7088 - 3 1.74.16 1.7751 1.8493 1.8443 1.8600 1.9166 1.9539 1.9921 2.0311	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
220000 220500 221600 221500 222500 222500 223500 223500 224500 224500	217703 218193 218682 219172 219661 220151 220640 221130 221619 222109	31.506 31.504 31.503 31.501 31.500 31.498 31.497 31.495 31.494	2.5317 - 4 2.4827 2.4345 2.3872 2.3406 2.2949 2.22499 2.2097 2.1623 2.1196	22677. 22619. 22562. 22504. 22447. 22389. 22332. 22274. 22217. 22159.	7.5788 +19 7.4325 7.2887 7.1473 7.0083 6.8716 6.7373 6.4755 6.3479	1348.8 1347.1 1345.3 1343.6 1341.8 1340.1 1338.3 1336.6 1334.8	6.5130 + 5 6.3790 6.2474 6.1183 5.9915 5.8670 5.7448 5.6248 5.5070 5.3914	2.0710 - 3 2.1117 2.1534 2.1560 2.2396 2.2841 2.3297 2.3762 2.4239 2.4726	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
225000 225500 226000 226500 227500 227500 228500 229500 229500	222598 223087 223577 224066 224555 2255534 226023 226512 227002	31.491 31.489 31.488 31.486 31.485 31.482 31.482 31.480 31.477	2.0776 - 4 2.0364 1.9959 1.9561 1.9169 1.8785 1.8407 1.8036 1.7672	22102. 22044. 21987. 21929. 21872. 21814. 21757. 21699. 21642. 21584.	6.2225 +19 6.0993 5.9782 5.8592 5.7423 5.6274 5.5145 5.4036 5.2947 5.1876	1331.3 1329.5 1327.8 1326.0 1324.2 1322.5 1320.7 1318.9 1317.1	5.2779 + 5 5.1666 5.0573 4.9500 4.8448 4.7415 4.6401 4.5507 4.4431 4.3474	2.5224 - 3 2.5733 2.6255 2.6758 2.7333 2.7891 2.8462 2.9046 2.9046 3.0256	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE ▼.-Continued GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

			GEOPOTEN		THUDE, EN	GLISH U	MITS		
Altit		Accel. due fo	Specific weight	Pressure scale height	density	Particle speed	frequency		weight
H, ft	Z, ft	g, ft sec-2	weight ω, lb ft ⁻² sec ⁻²	.H _p , ft	n, ft ⁻⁸	∇, ft sec ⁻¹	ν, sec'	L, ft	. M
230000 230500 231000 231500 232500 232500 233000 234000 234500	232565 233076 233588 234079 234610 235122 235633 236144 223656 237167	31.468 31.467 31.465 31.464 31.461 31.459 31.459 31.456 31.454	1.5253 - 4 1.4931 1.4615 1.4305 1.4000 1.3701 1.3408 1.3120 1.2837 1.2560	21232. 21173. 21114. 21055. 20996. 20937. 20879. 20820. 20761. 20702.	4.5716 +19 4.4753 4.3807 4.2880 4.1969 4.1075 4.0197 3.9336 3.8491 3.7662	1304.4 1302.5 1300.7 1298.8 1297.0 1295.1 1293.3 1291.4 1289.6 1287.7	3.7991 + 5 3.7139 3.6303 3.5883 3.4680 3.3993 3.3122 3.2365 3.1625 3.0099	3.4333 - 3 3.5072 3.5829 3.6604 3.7399 3.8213 3.9007 3.9901 4.0777 4.1675	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
235000 235500 236000 236500 237500 237500 238500 238500 238500 239500	237679 238190 238702 239213 239725 240748 2417259 241771 242283	31.453 31.451 31.450 31.448 31.447 31.444 31.444 31.444 31.444	1.2288 - 4. 1.2021 1.1760 1.1503 1.1251 1.1004 1.0761 1.0523 1.0290 1.0061	20643. 20584. 20525. 20466. 20408. 20349. 20290. 20231. 20172. 20113.	3.6848 +19 3.6049 3.5266 3.4497 3.3743 3.3004 3.2278 3.1566 3.0868 3.0184	1285.8 1284.0 1282-1 1280.2 1278.4 1276.5 1274.6 1272.7 1270.8 1268.9	3-0187 + 5 2.9490: 2.8807 2.8138 2.7483 2.6841 2.6212 2.5596 2.4993 2.4403	4.2596 - 3 4.3539 4.4506 4.5498 4.6515 4.7557 4.8626 4.9723 5.0847 5.2000	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
240000 240500 241000 241500 242000 243500 243500 243500 244500	242794 243306 243818 244330 244842 245353 245865 246377 246689 247401	31.438 31.435 31.435 31.432 31.432 31.430 31.427 31.427 31.425	9.8372 - 5 9.6173 9.4016 9.1902 8.9828 8.7796 8.5804 8.3851 8.1937 8.0060	20054- 19995- 19936- 19877- 19818- 19759- 19700- 19641- 19582- 19523-	2.9512 +19 2.8854 2.8208 2.7575 2.6954 2.6346 2.5749 2.5164 2.4591 2.4029	1267.1 1265.2 1263.3 1261.4 1259.5 1257.6 1255.6 1253.7 1251.8 1249.9	2.3824 + 5 2.3258 2.2703 2.2161 2.1629 2.1109 2.0599 2.0101 1.9613 1.9135	5.3183 - 3 5.4397 5.5642 5.6619 5.8230 5.9575 6.0956 6.2372 6.3826	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
245000 245500 246500 246500 247500 247500 248000 248500 249500	247913 248425 248937 249449 249961 250483 250985 251497 252009 252521	31.422 31.421 31.42 31.42 31.42 31.41 31.41 31.41	7.8222 - 5 7.4920 7.465 7.292 7.123 6.957 6.794 6.634 6.478 6.325	19464. 19405. 19345 19287. 19228. 19169. 19110. 19051. 18772. 18933.	2.3478 +19 2.2939 2.241 2.189 2.138 2.089 2.040 1.992 1.945	1248.0 1240.1 1244. 1242. 1240. 1236. 1236. 1234. 1233. 1231.	1.8668 + 5 1.8211 1.776 1.733 1.690 2.646 1.607 1.567 1.528 1.489	0.6851 - 3 6.8824 7.004 7.170 7.340 7.515 7.695 7.879 8.069 8.263	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
250000 250500 251000 251500 251500 252500 253500 253500 253500 254500	253034 253546 254058 254570 255083 255595 256107 256620 257132 257645	31.41 31.40 31.40 31.40 31.40 31.40 31.40 31.40 31.40	6.176 - 5 6.029 5.885 5.744 5.607 5.472 5.340 5.210 5.084 4.960	18875- 18815- 18756- 18697- 18638- 18579- 18520- 18461- 18401- 18342-	1.855 +19 1.811 1.767 1.725 1.684 1.644 1.664 1.565 1.5527	1229. 1227. 1225. 1223. 1221. 1217. 1217. 1215. 1213.	1.452 + 5 1.415 1.379 1.344 1.310 1.276 1.211 1.180	8.464 - 3 8.669 8.880 9.097 9.221 9.550 9.786 1.003 - 2 1.028 1.053	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
255000 255500 256000 256500 256500 257500 258500 258500 258500 258500	258157 258669 259182 259694 260207 260720 261232 261745 262257 262770	31.39 31.39 31.39 31.39 31.39 31.38 31.38 31.38 31.38	4.839 - 5 4.720 4.604 4.490 4.379 4.270 4.164 4.059 3.957 3.850	18233- 18224- 18145- 18106- 18047- 17988- 17928- 17869- 17810- 17789-	1.454 +19 1.418 1.383 1.349 1.316 1.283 1.221 1.220 1.189 1.157	1209. 1207. 1205. 1203. 1201. 1.109. 1197. 1195. 1193. 1192.	1.120 + 5 1.991 1.062 1.034 1.007 1.007 9.802 + 4 9.542 9.289 9.041 8.789	1.080 - 2 1.107 1.135 1.163 1.193 1.223 1.223 1.254 1.254 1.350 1.356	26.964 28.964 28.964 28.964 28.964 28.964 28.964 26.964 26.964
260000 260500 261000 261500 262500 262500 263500 263500 264500 264500	263283 263796 264308 264821 265334 265847 266359 266872 267385 267898	31.38 31.37 31.37 31.37 31.37 31.37 31.37 31.37 31.37	3.740 - 5 3.634 3.530 3.430 3.332 3.237 3.145 3.156 2.969 2.884	17789. 17790. 17791. 17792. 17793. 17794. 17796. 17796. 17797.	1-124 +19 1-092 1-061 1-031 1-002 9-734 +18 9-457 9-189 8-928 8-674	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	8.540 + 4 8.297 8.061 7.632 7.610 7.394 7.184 6.979 6.781 6.589	1.396 - 2 1.437 1.479 1.522 1.567 1.612 1.660 1.708 1.758 1.810	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
265000 265500 266500 266500 267000 267500 268500 268500 269500	268411 268924 269437 269950 270463 270976 271489 272002 272516 273029	31.36 31.36 31.36 31.36 31.35 31.35 31.35 31.35	2.802 - 5 2.723 2.645 2.570 2.497 2.426 2.357 2.290 2.224 2.161	17798. 17799. 17800. 17601. 17802. 17802. 17803. 17804. 17805. 17806.	8.188 7.955 7.729 7.510 7.297 7.089 6.888 6.692 6.502	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	6.401 + 4 6.220 6.743 5.871 5.871 5.542 5.385 5.232 5.083 4.939	1.862 - 2 1.917 1.973 2.031 2.090 2.151 2.214 2.279 2.345 2.414	26.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE V.—Continued
GEOMETRIC ÁLTITUDE, ENGLISH UNITS

Altit	ude	Accel.		Pressure scale	Number density	Particle speed	Collision frequency	Mean free	Molecular weight
Z, ft	H, ft		ω, ib ft ⁻² sec ²	height H _P , ft	n, ft ⁻³	V, ft sec	, ,	ե, ft	M
230000 230500 231000 231500 232500 232500 233500 233500 234500	227%91 227980 228469 228958 229447 229936 230425 230915 231403 231892	31.476 31.474 31.473 31.471 31.470 31.467 31.467 31.465 31.465	1.6962 - 4 1.6616 1.6277 1.5943 1.5616 1.5294 1.4979 1.4669 1.4364 1.4065	21527. 21469. 21412. 21354. 21297. 21239. 21182. 21124. 21067. 21009.	5.0825 +19 4.9792 4.8777 4.7780 4.6801 4.5840 4.896 4.3968 4.3058 4.2164	1313. 1311.8 1310.0 1308.2 1306.4 1304.6 1302.8 1301.0 1299.2	4.2535 + 5 4.1613 5.0710 3.9823 3.8954 3.8101 3.7205 3.6445 3.5641 3.4852	5.0882 - 3 3.1523 3.2179 3.2050 3.3537 3.4240 3.4960 3.5698 3.6453 3.77226	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
235000 235500 236000 236500 237000 237500 238000 238500 239500	232381 232370 233359 2333648 234337 234825 235314 235003 236292 236780	31.459 31.458 31.458 31.455 31.453 31.452 31.450 31.447	1.3772 - 4. 1.3484 1.3201 1.2923 1.2923 1.23650 1.23650 1.2120 1.1862 1.1609 1.1361	20951. 20894. 20836. 20779. 20721. 20664. 20549. 20491. 20433.	4.1286 +19 4.0424 3.9577 3.8747 3.7731 3.7130 3.6384 3.5573 3.4816 3.4073	1295.6 1293.8 1292.0 1290.1 1286.3 1286.5 1284.7 1282.8 1281.0	3.4079 + 5 3.3321 3.2577 3.1849 3.1134 3.0434 2.9747 2.9075 2.8769	3.8017 = 3 3.8828 3.9058 4.0508 4.1380 4.2272 4.3186 4.4122 4.5082 4.6065	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
240000 240500 241500 241500 242600 242500 243500 243500 243500 243500 244500	237269 237758 236246 238735 239224 239712 240689 241178 241666	31.445 31.445 31.443 31.440 31.459 31.439 31.435 31.435	1.1117 - 4 1.0878 1.0643 1.0643 1.0187 9.9657 - 5 9.7483 9.5351 9.3259 9.1207	20376. 20318. 20261. 20203. 20146. 20088. 20030. 19973. 19915. 19858.	3.3344 +19 3.2628 3.1926 3.1237 3.0560 2.9897 2.9246 2.8608 2.7982 2.77867	1277.4 1275.5 1273.7 1271.8 1270.0 1268.1 1266.3 1264.4 1262.6 1260.7	2.7136 + 5 2.6515 2.5907 2.5311 2.4728 2.4156 2.3595 2.3047 2.2509 2.1982	4.7073 - 3 4.8105 4.9163 5.0248 5.1359 5.2499 5.3667 5.4865 5.6093 5.7352	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
245000 245500 246000 246500 247500 248500 248500 248500 248500	242155 242643 243132 243620 244108 244597 245085 245573 246062 246550	31.431 31.430 31.43 31.43 31.43 31.42 31.42 31.42 31.42	8.9195 - 5 8.7221 8.529 8.339 6.153 7.970 7.791 7.616 7.444 7.275	19800- 19742- 19685- 19627- 19569- 19512- 19454- 19397- 19359- 19281-	2.6765 +19 2.6174 2.559 2.503 2.447 2.392 2.339 2.286 2.235 2.184	1258.9 1257.0 1255. 1253. 1251. 1250. 1248. 1244. 1244.	2.1467 + 5 2.0962 2.047 1.998 1.951 1.904 1.859 1.814 1.771 1.728	5.8643 - 3 5.9967 6.133 6.272 6.415 6.561 6.712 6.866 7.024 7.187	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
250000 250500 251000 251500 252600 252600 253500 253500 254500	247038 247526 248503 248503 248991 249479 2590455 250455 251431	31.42 31.41 31.41 31.41 31.41 31.41 31.40 31.40	7.110 - 5 6.948 6.789 6.634 6.481 6.3325 6.042 5.901 5.764	19224. 19166. 19108. 19051. 18993. 18936. 18820. 18763. 18705.	2.135 +19 2.086 2.038 1.992 1.986 1.901 1.857 1.814 1.772 1.772	1240. 1236. 1236. 1234. 1231. 1227. 1227. 1225. 1223.	1.686 + 5 1.686 1.606 1.507 1.528 1.891 1.891 1.818 1.885 1.385 1.389	7.353 - 3 7.524 7.700 7.880 8.065 8.255 8.450 8.650 8.856 9.067	28.964 28.964 28.964 20.964 28.964 28.964 28.964 28.964 28.964
255000 255000 256000 256500 257500 257500 258000 258000 258500 258500	251,919 252407 252895 253383 253871 254359 254847 255335 255822 254310	31.40 31.40 31.40 31.40 31.39 31.39 31.39	5.629 - 5 5.496 5.367 5.240 5.116 h.995 h.675 h.6533	18647. 18590. 18532. 18474. 18474. 18359. 18301. 18244. 18186.	1.691 +19 1.651 1.612 1.574 1.537 1.500 1.465 1.430 1.396 1.362	1221. 1219. 1217. 1215. 1215. 1210. 1208. 1206. 1204.	1.315 + 5 1.282 1.250 1.219 1.188 7.158 1.129 1.100 1.072 1.045	9.284 - 3 9.507 9.736 9.971 1.021 - 2 1.046 1.072 1.098 1.125 1.152	28.964 25.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
260000 260500 261000 261500 262500 262500 263500 263500 264500	256798 257286 257774 258261 258749 259237 259224 260212 260699 261187	31.38 31.38 31.38 31.38 31.38 31.38 31.38 31.38	h. 423 - 5 h. 316 h. 211 h. 109 h. 108 3. 909 3. 895 3. 895 3. 492	18071. 18013. 17955. 17898. 1789. 17789. 17790. 17791. 17792.	1.329 +19 1.297 1.265 1.235 1.205 1.175 1.175 1.142 1.111 1.080	1202. 1200. 1198. 1196. 1194. 1192. 1192. 1192.	1.018 + 5 9.916 + 4 9.659 9.164 8.924 8.677 8.436 8.202 7.975	1.181 - 2 1.210 1.240 1.271 1.303 1.336 1.374 1.413 1.454 1.495	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
245000 245000 246000 246000 246000 247000 248000 248000 249000	261675 262162 262650 263137 263137 264112 264519 265574 265574 266061	31.37 31.37 31.37 31.37 31.36 31.36 31.36 31.36	3.395 = 5 3.301 3.121 3.034 2.950 2.868 2.780 2.780 2.636	17792. 17793. 17794. 17795. 17796. 17797. 17798. 17799. 17800.	1.021 +19 9.925 +18 9.650 9.383 9.123 8.870 8.624 8.386 8.153 7.927	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	7.75h + h 7.539 7.330 7.127 6.930 6.930 6.551 6.369 6.193 6.022	1.538 - 2 1.581 1.626 1.673 1.720 1.769 1.820 1.872 1.925 1.980	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964

TABLE V.—Concluded
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

			GLOI OTEN	HAL AL	IIIODĘ, EN	GLISH U	1411.5		
Alti	tude	Accel.	Specific weight	Pressure scale height	Number density	Particle speed	frequency	Mean free path	Molecular weight
H, ff	Z, ft	g, ft sec-2	weigin = 2 ω, lb ft ⁻² sec ⁻²	H _P , ft	n, f <u>t</u> -3	∇, ft sec⁻¹	ν, sec'	L, ft	M
270000 270500 271500 271500 272500 272500 273000 273500 274500 274500	273542 274055 274568 275582 275595 276108 27662 277135 27764 B 278162	31.35 31.34 31.34 31.34 31.34 31.34 31.34 31.33	2.100 - 5 2.040 1.982 1.925 1.871 1.817 1.766 1.715 1.667 1.619	17807. 17808. 17808. 17809. 17810. 17811. 17812. 17813. 17814. 17815.	6.317 +18 6.138 5.963 5.794 5.629 5.469 5.314 5.163 5.016	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	4.799 + 4 4.662 4.530 4.401 4.276 4.155 4.037 3.922 3.810 3.702	2.4852 2.557 2.632 2.709 2.788 2.870 2.954 3.040 3.129 3.220	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
275000 275500 276500 276500 277500 277500 278500 278500 279500	278675 279189 279702 280216 280729 281243 281243 281270 282770 282784 283297	31.33 31.33 31.33 31.32 31.32 31.32 31.32 31.32 31.32	1.573 - 5 1.528 1.485 1.443 1.402 1.362 1.323 1.285 1.249	17815- 17816- 17817- 17818- 17819- 17820- 17821- 17821- 17822- 17823-	4.735 +16 4.601 4.470 4.343 4.220 4.100 3.983 3.870 3.750 3.654	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	3.597 + 4 3.495 3.396 3.299 3.205 3.114 3.026 2.940 2.856 2.775	3.514 - 2 3.411 3.511 3.614 3.719 3.828 3.940 4.055 4.174 4.296	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
280000 280500 281000 281500 282000 282500 283500 284500 284500	283811 284325 284838 285352 285866 286380 286894 287408 207921 288435	31.32 31.31 31.31 31.31 31.31 31.31 31.31 31.30 31.30	1.179 - 5 1.145 1.113 1.081 1.050 1.020 9.912 - 6 9.630 9.356 9.089	17824. 17825. 17826. 17827. 17828. 17828. 17829. 17830. 17831. 17832.	3.550 +18 3.449 3.351 3.256 3.163 3.073 2.984 2.901 2.819 2.739	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	2.696 + 4 2.620 2.545 2.473 2.403 2.334 2.268 2.204 2.141 2.080	4.422 - 2. 4.551 4.684 4.621 4.962 5.107 5.256 5.410 5.568. 5.731	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
285000 285500 286000 286500 287000 287500 288500 288500 289500	288949 289463 289977 290491 291005 291519 292033 292548 293062 293576	31.30 31.30 31.30 31.30 31.29 31.29 31.29 31.29 31.29 31.29	8.831 - 6 8.579 8.335 8.098 7.868 7.644 7.426 7.215 7.010 6.810	17833. 17834. 17834. 17835. 17836. 17837. 17839. 17840. 17841.	2.661 +18 2.585 2.585 2.512 2.441 2.371 2.304 2.238 2.175 2.113 2.053	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	2.021 + 4 1.964 1.908 1.854 1.801 1.750 1.700 1.652 1.605	5.899 - 2 6.249 6.431 6.619 6.813 7.012 7.217 7.428 7.645	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
290000 290500 291500 291500 292500 292500 293500 294500 294500	294090 294604 295119 295633 295647 296661 29717690 298204 298719	31.29 31.28 31.28 31.28 31.28 31.28 31.28 31.27 31.27	6.616 - 6 6.4285 6.057 5.870 5.870 5.3185 5.3185 5.181 5.023	17841. 17842. 17843. 17876. 17924. 17971. 18018. 18066. 18113. 18160.	1.995 +18 1.938 1.883 1.826 1.770 1.715 1.663 1.612 1.5563 1.515	1192. 1192. 1192. 1193. 1195. 1196. 1199. 1201. 1203.	1.515 + 4 1.472 1.430 1.388 1.347 1.308 1.249 1.249 1.252 1.196	7.869 - 2 8.099 8.336 8.595 8.868 9.150 9.439 9.737 1.004 - 1	28.964 28.964 28.964 28.964 28.963 28.963 28.963 28.963 28.962
295000 295500 294000 296500 297000 297500 298500 298500 299500	299233 299748 300262 300777 30129 301806 302321 302835 303350 303864	31.27 31.27 31.27 31.27 31.26 31.26 31.26 31.26 31.26	N.871 N.723 N.580 N.442 N.308 N.053	18208- 18255- 18302- 18350- 18397- 18445- 18492- 18539- 18587- 18634-	1.469 +18 1.425 1.382 1.340 1.300 1.261 1.223 1.187 1.151 1.117	1206. 1206. 1207. 1209. 1210. 1212. 1213. 1215. 1216. 1218.	1:.127 + 4 1.094 1.063 1.032 1.002 1.002 9.734 + 3 9.454 9.184 8.922 8.668	1.008 - 1 1.102 1.130 1.171 1.208 1.245 1.283 1.323 1.363 1.405	28.961 28.961 28.961 28.960 28.959 28.959 28.958 28.958 28.958
300000	90#379	31.25	3.591 - 6	18682.	1.08% +18	1219.	8.422 + 3	1.448 - 1	28.956
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TABLE ▼.—Continued GEOMETRIC ALTITUDE, ENGLISH UNITS

		METRIC ALIT		3			
Altitude	Accel. Spec	LL 1 Soule 🗸	Number density	Particle speed	Collision frequency	Mean free	Molecular weight
Z, ft H, ft	gravity g, ft sec ⁻² ω, lb ft	sec Hp, ft	n, ft ^{-3.}	∇, ft sec ⁻¹	ν, sec ¹	L, ft	. M
270000 266549 270500 267523 271500 268010 272000 2688010 272000 268848 272500 268958 273500 269959 274000 270446 274500 270933	31.36 2.563 31.36 2.491 31.35 2.492 31.35 2.492 31.35 2.290 31.35 2.226 31.35 2.165 31.35 2.165 31.35 2.105 31.34 2.046 31.34 1.989	- 5 17801. 17802. 17802. 17803. 17804. 17805. 17306. 17307. 17308.	7.708 +18 7.494, 7.287 7.085 6.889 6.513 6.332 6.157 5.986	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	5.855 + 4 5.693 5.535 5.382 5.088 4.947 4.810 4.677 4.547	2.036 - 2 2.094 2.154 2.215 2.278 2.343 2.410 2.479 2.549 2.622	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
275000 271420 275500 271908 276000 272395 276500 272882 277500 273856 277500 273856 278000 274542 278500 274829 2779500 275803	31.34 1.934 31.34 1.881 31.34 1.778 31.34 1.778 31.33 1.681 31.33 1.681 31.33 1.589 31.33 1.589 31.33 1.595	- 5 17809. 17810. 17810. 17812. 17813. 17813. 17814. 17815. 17816.	5.821 +18 5.660 5.503 5.351 5.202 5.058 4.918 4.782 4.650 4.521	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	4.421 + 4 4.299 4.180 4.064 3.952 3.842 3.736 3.633 3.532 3.434	2.697 - 2 2.773 2.852 2.933 3.017 3.103 3.191 3.282 3.375 3.472	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
280000 276290 280500 276777 281000 277264 281500 277250 282000 278237 282500 27821 283500 279211 283500 279497 284000 280184 284500 280671	31.33 1.460 31.33 1.420 31.32 1.380 31.32 1.342 31.32 1.269 31.32 1.269 31.32 1.199 31.32 1.199 31.32 1.199	- 5 17818. 17818. 17819. 17819. 17820. 17821. 17822. 17823. 17824. 17824.	4.396 +18 4.274 4.156 4.041 3.929 3.821 5.715 3.612 3.512 3.415	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	3.339 + 4 3.247 3.157 3.070 2.985 2.902 2.822 2.744 2.668 2.594	3.570 - 2 3.672 3.775 3.884 3.994 4.108 4.225 4.345 4.469 4.596	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
285000 281157 285500 282150 284000 282130 280500 282617 287000 283103 287500 283590 288500 284576 288500 284563 289500 285534	31.31 1.102 31.31 1.042 31.31 1.043 31.31 9.853 31.30 9.580 31.30 9.314 31.30 9.314 31.30 8.806 31.30 8.806	- 5 17826. 17827. 17828. 17829. 17839. 17831. 17832. 17834.	3.321 +16 3.229 3.140 3.053 2.968 2.886 2.806 2.729 2.653 2.580	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	2.522 + 4 2.453 2.385 2.319 2.255 2.192 2.132 2.073 2.015 1.960	4.727 - 2 4.861 4.999 5.142 5.288 5.438 5.593 5.752 5.752 6.084	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
290000 286022 290500 296509 291000 286995 291500 287481 292000 287967 292500 28854 293000 288950 293500 289920 294500 289912 294500 290399	31.30 8.325 31.30 8.094 31.29 7.870 31.29 7.652 31.29 7.440 31.29 7.034 31.29 7.034 31.29 6.839 31.29 6.830 31.29 6.466	- 6 17835. 17835. 17836. 17837. 17837. 17839. 17840. 17840. 17841.	2.509 +18 2.439 2.372 2.306 2.243 2.181 2.120 2.062 2.005 1.949	1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192. 1192.	1.906 + 4 1.853 1.802 1.752 1.703 1.656 1.611 1.566 1.523 1.481	6.257 - 2 6.434 6.617 6.806 6.999 7.198 7.403 7.613 7.829 8.052	28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964 28.964
295000 290885 295500 291371 296000 291857 296500 292343 297000 292829 297500 293315 298000 293801 298500 294287 299000 294773 299500 295259	31.28 6.287 31.28 5.922 31.28 5.745 31.28 5.573 31.28 5.573 31.27 5.296 31.27 5.090 31.27 4.939 31.27 4.793	E.	1.895 +18 1.841 1.786 1.732 1.681 1.631 1.535 1.590 1.446	1192. 1193. 1194. 1196. 1197. 1199. 1200. 1202. 1203. 1205.	1.440 + 4 1.399 1.359 1.320 1.282 1.245 1.210 1.176 1.142 1.110	8.281 = 2 8.526 8.789 9.060 9.339 9.626 9.921 1.022 - 1 1.053 1.085	28.964 28.964 28.963 28.963 28.963 28.962 28.962 28.962 28.962
300000 295745	31.27 4.652	- 6 18278.	1.403 +18	1206.	1.079 + 4	1.118 - 1	28.96.1
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TABLE V.-Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

		"		·	ODE, ENGE			· · · · · · · · · · · · · · · · · · ·	7
Altit	udė	Accel.	Specific weight	Pressure scale height	Number density	Particle speed	Collision frequency	iviean free path	Molecular weight
Z, ft	H, ff	g, ft sec ⁻²	weight ω, lb ft ⁻² sec ⁻²	H _e , ft	n, fi ⁻⁸	∇, ft sec ⁻¹	ν, sec ⁻¹	L, ft	M .
300000 301000 302000 303000 304000 305000 306000 307000 308000	295745 296717 297689 298660 299632 300603 301574 302546 303517 304488	31.27 31.26 31.26 31.26 31.25 31.25 31.25 31.25 31.25	4.652 - 6 4.383 4.151 3.894 3.672 3.408 3.268 3.268 3.268 2.912 2.749	18278. 18370. 18462. 18555. 18647. 18739. 18831. 18923. 19016.	1.403 +18 1.322 1.246 1.175 1.108 1.046 9.866 +17 9.313 8.793 8.305	1206. 1209. 1212. 1215. 1218. 1221. 1224. 1227. 1230. 1233.	1.079 + 4 1.019 9.627 + 3 9.099 8.602 8.135 7.695 7.281 6.891 6.523	1.118 - 1 1.187 1.259 1.336 1.416 1.501 1.591 1.685 1.785	28.96 28.96 28.96 28.96 28.96 28.95 28.95 28.95 28.95 28.95
310000 311000 312000 313000 314000 315000 316000 317000 319000	305459 306430 307400 30837.1 309342 310312 311263 312253 313223 314193	31.24 31.23 31.23 31.23 31.22 31.22 31.22 31.22 31.21	2.597 - 6 2.454 2.319 2.192 2.073 1.961 1.855 1.755 1.662 1.573	19200- 19292- 19385- 19477- 19569- 19662- 19754- 19846- 19939- 20031-	7.846 +17 7.414 7.008 6.626 6.267 5.928 5.610 5.310 5.027 4.761	1236. 1239. 1242. 1245. 1247. 1250. 1253. 1256. 1259. 1262.	6.177 + 3 5.851 5.544 5.254 1.981 4.723 4.479 4.249 4.032 3.827	2.00.1 - 3. 2.117 2.240 2.369 2.505 2.648 2.798 2.956 3.3122 3.297	28.95 28.95 28.94 28.94 28.94 28.93 28.93 28.93 28.93 28.92
320000 321000 322000 323000 324000 325000 326000 327000 328000 329000	3151633 316133 317103' 318073 319043 320012 320982 321951 322920 323890	31.21 31.21 31.20 31.20 31.20 31.19 31.19 31.19 31.19	1.490 - 6 1.411 1.337 1.267 1.201 1.139 1.080 1.025 9.725 - 7	20123. 20216. 20308. 20403. 20493. 20586. 20678. 20771. 20863. 21011.	4.510 +17 4.273 4.050 3.839 3.640 3.453 3.275 3.108 2.950 2.793	1265. 1267. 1270. 1273. 1276. 1279. 1282. 1284. 1287. 1292.	3.634 + 3 3.451 3.278 3.1,14 2.959 2.813 2.674 2.543 2.419 2.299	3.480 - 1 3.673 3.676 4.088 4.312 4.546 4.792 5.050 5.320 5.619	28.92 28.91 28.91 28.90 28.90 28.89 28.88 28.88 28.88
33000 331000 332000 333000 334000 335000 337000 337000 338000	324859 325828 326797 327.766 328734 329703 330672 331640 332609 333577	31.18 31.18 31.17 31.17 31.17 31.16 31.16 31.16 31.16 31.16	8.717 - 7 8.256 7.823 7.415 7.032 6.670 6.330 6.009 5.706 5.420	21164. 21317. 21470. 21624. 21777. 21930. 22083. 2236. 22389. 22543.	2.646 +17 2.507 2.376 2.253 2.137 2.028 1.925 1.828 1.737 1.650	1296. 1301. 1306. 1310. 1315. 1319: 1324. 1328. 1333. 1337.	2.185 + 3 2.078 1.976 1.880 1.790 1.624 1.547 1.406	5.933 - 1 6.261 6.606 6.967 7.345 7.740 8.153 8.586 9.038 9.510	28.87 28.86 28.85 28.85 28.84 28.83 28.62 28.81 28.80
340000 341000 342000 343000 344000 345000 346000 346000 349000	334545 335513 336481 337449 338417 339385 340352 341320 342287 343255	31.15 31.15 31.14 31.14 31.14 31.13 31.13 31.13 31.13	5.151 - 7 4.897 4.656 4.429 4.215 4.012 3.620 3.639 3.467 3.304	22696. 22849. 23003. 23156. 23310. 23463. 23616. 23770. 23723. 24077.	1.569 +17 1.492 1.420 1.351 1.286 1.225 1.167 1.112 1.060 1.010	1342. 1346. 1351. 1355. 1360. 1368. 1373. 1377.	1.341 + 3 1.280 1.222 1.166 1.114 1.064 1.017 9.722 + 2 9.297 8.893	1.000 + 0 1.052 1.106 1.162 1.220 1.282 1.345 1.412 1.481 1.553	28.79 28.78 28.77 28.76 28.75 28.75 28.74 28.73 28.72 28.71 28.70
350000 351000 352000 353000 354000 355000 356000 357000 358000 359000	344222 345189 346157 347124 348090 349057 350024 350991 351957 352924	31.12 31.12 31.11 31.11 31.11 31.10 31.10 31.10 31.09	3.150 ~ 7 3.004 2.866 2.734 2.610 2.492 2.380 2.273 2.172 2.076	24231. 24384. 24536. 24691. 24845. 24999. 25153. 25306. 25460. 25614.	9.638 +16 9.195 8.776 8.378 8.001 7.643 7.303 6.980 6.674 6.382	1386. 1390. 1394. 1399. 1403. 1407. 1411. 1416. 1420. 1424.	8.509 + 2 8.144 7.796 7.466 7.152 6.852 6.567 6.296 6.037 5.791	1.629 + 0 1.707 1.788 1.973 1.962 2.05k 2.149 2.249 2.352 2.459	28.69 28.68 28.67 28.66 28.64 28.63 28.62 28.61 28.60 28.58
360000 361000 362000 363000 364000 365000 366000 367000 369000	353890 354856 355623 356789 357755 358721 359687 360652 361618 362584	31.09 31.09 31.08 31.08 31.08 31.07 31.07 31.07	1.965 - 7 1.897 1.805 1.718 1.636 1.559 1.486 1.417 1.352	25768. 25938. 26244. 26549. 26855. 27160. 27466. 27771. 28077. 28383.	6.105 +16 5.838 5.557 5.291 5.042 4.807 4.585 4.376 4.178 3.992	1428. 1433. 1441. 1450. 1458. 1466. 1474. 1482. 1490. 1498.	5.556 + 2 5.330 5.103 4.887 4.683 4.490 4.306 4.133 3.968 3.811	2.571 + 0 2.688 2.825 2.926 3.113 3.265 3.423 3.587 3.756 3.932	28.57 28.56 28.54 28.53 28.52 28.50 28.49 20.48 28.46 28.45
370000 371000 372000 373000 374000 375000 377000 377000 378000	363549 364514 365480 366445 367410 368375 369340 370305 371270 372234	31.06 31.06 31.05 31.05 31.05 31.05 31.04 31.04 31.04	1.23% - 7 1.179 1.127 1.078 1.032 9.882 - 8 9.862 - 8 9.071 8.697 8.341	28689. 28995. 29301. 29607. 29913. 30219. 30525. 30832. 31138. 31444.	3.816 +16 3.649 3.491 3.342 3.200 3.066 2.939 2.818 2.703 2.595	1500. 1514. 1522. 1530. 1538. 1546. 1553. 1561. 1569.	3.662 + 2 3.520 3.386 3.258 3.136 3.019 2.909 2.803 2.702 2.606	4.114 + 0 4.302 4.496 4.697 4.695 5.319 5.341 5.570 5.806 6.049	28.43 28.42 28.40 28.39 28.37 28.36 28.34 28.31 28.31

Altit		Accel. due to	Specific weight	Pressure scale height	Number density	Particle speed	Collision frequency	Mean free path	Molecular weight
Z, ft	H, ft	g, ft sec-2	weight ω, lb ft ⁻² sec ⁻²	H _e , ft	n, f.t ^{-#}	∇, ft sec¯'	ν, sec ⁻¹	L, ft	M
380000 381000 382000 383000 384000 385000 386000 387000 389000	373199 374163 375128 376092 377056 378080 378984 379948 380912 381876	31.03 31.03 31.03 31.02 31.02 31.02 31.02 31.01 31.01	8.003 - 8 7.682 7.377 7.086 6.810 6.546 6.296 6.056 5.828 5.613	31751. 32057. 32364. 32670. 32977. 33284. 33591. 33897. 34204.	2.491 +15 2.393 2.299 2.210 2.125 2.044 1.967 1.894 1.823 1.757	1584. 1592. 1599. 1607. 1614. 1621. 1629. 1636. 1643.	2.514 + 2 2.426 2.342 2.262 2.185 2.112 2.041 1.974 1.909 1.847	5.301 + 0 6.560 6.827 7.103 7.386 7.678 7.979 8.608 8.936	28.28 28.27 28.25 28.24 28.22 28.21 28.19 28.17 28.16 28.14
390000 391000 392000 393000 394000 395000 396000 397000 398000	382840 383803 384767 385730 386693 387656 388620 389583 399586 391508	31.00 31.00 31.00 30.99 30.99 30.99 30.99 30.98 30.98	5.403 - 8 5.205 5.016 4.835 4.650 4.449 4.260 4.081 3.913 3.754	34818. 35125. 35433. 35740. 36138. 36749. 37972. 38583. 39195.	1.693 +16 1.632 1.573 1.518 1.461 1.398 1.340 1.284 1.284 1.282 1.183	1658. 1672. 1680. 1689. 1703. 1717. 1731. 1745.	1.788 + 2 1.731 1.676 1.624 1.572 1.517 1.466 1.416 1.370 1.325	9.273 + 0 9.620 9.976 1.034 + 1 1.075 1.122 1.172 1.222 1.274 1.327	28.13 28.11 28.10 28.08 28.06 28.05 28.03 28.02 28.00 27.98
400000 402000 404000 406000 410000 412000 414000 416000 418000	392471 394396 396321 398246 400170 402094 404017 405940 407863 409785	30.97 30.97 30.96 30.96 30.95 30.95 30.94 30.93 30.93	3.604 - 8 3.328 3.080 2.857 2.655 2.473 2.307 2.156 2.019 1.893	39807. 41031. 42255. 43480. 44705. 45931. 47157. 48384. 49611. 50839.	1.136 +16 1.051 9.737 +15 9.043 8.416 7.848 7.31 6.861 6.432 6.039	1772. 1799. 1825. 1851. 1877. 1902. 1928. 1952. 1977. 2001.	1.283 + 2 1.204 1.132 1.067 1.006 9.512 + 1 9.003 8.534 8.100 7.698	1.381 + 1 1.494 1.612 1.736 1.865 2.000 2.141 2.288 2.440 2.599	27.97 27.94 27.91 27.88 27.85 27.82 27.78 27.76 27.73 27.70
42000 422000 424000 426000 428000 438000 432000 434000 436000 438000	411707 413629 415550 417471 419392 421312 421312 425151 427070 428989	30.92 50.91 30.90 30.89 30.89 30.89 30.88 30.88 30.87	1.778 - 8 1.672 1.575 1.486 1.403 1.403 1.255 1.190 1.129 1.072	52067. 53295. 54524. 55754. 56984. 58214. 59445. 60676. 61908. 63140.	5.679 +15 5.348 5.043 4.761 4.502 4.261 4.038 3.831 3.638 3.458	2025. 2048. 2071. 2074. 2117. 2140. 2164. 2206. 2228.	7.325 + 1 6.978 6.655 6.354 6.072 5.809 5.562 5.331 5.113 4.908	2.76% + 1 2.935 3.113 3.296 3.887 3.68% 3.887 4.097 4.315 4.539	27.67 27.64 27.61 27.58 27.56 27.53 27.50 27.48 27.45 27.43
44000 442000 444000 446000 45000 452000 452000 456000 456000	430907 432825 434743 436660 438577 440494 442410 444326 446241 448156	30.86 30.85 30.85 30.83 30.83 30.82 30.62 30.61	1.019 - 8 9.693 - 9 9.231 8.799 8.394 8.015 7.658 7.324 7.009 6.712	64373. 65606. 66839. 68073. 69308. 70543. 71776. 73014. 74250. 75487.	3.291 +15 3.134 2.988 2.851 2.723 2.602 2.489 2.382 2.282 2.188	2249. 2270. 2291. 2312. 2333. 2353. 2374. 2394. 2414. 2433.	4.716 + 3 4.534 4.362 4.200 4.7047 3.902 3.764 3.633 3.509 3.392	4.770 + 1 5.008 5.253 5.505 5.765 6.032 6.306 6.568 6.878 7.175	27.41 27.38 27.36 27.34 27.31 27.29 27.27 27.27 27.25 27.23 27.23
460000 462000 464000 466000 470000 472000 474000 474000 478000	450071 451985 453899 455813 457727 459639 461552 463864 465376 467288	30.80 30.79 30.79 30.78 30.78 30.77 30.77 30.75 30.75	6.433 - 9 6.169 5.920 5.684 5.462 5.251 5.051 4.682 4.511	76724. 77962. 79200. 80439. 81678. 82918. 84158. 85398. 86639. 87881.	2.098 +15 2.014 1.934 1.849 1.788 1.720 1.656 1.595 1.595	2453. 2473. 2473. 2592. 2592. 2530. 2549. 2568. 2605. 2623.	3.279 + 1 3.173 3.071 2.974 2.882 2.794 2.709 2.629 2.552 2.478	7.480 + 1 7.793 8.114 8.442 8.779 9.124 9.477 9.838 1.021 + 2	27-19 27-17 27-15 27-13 27-12 27-10 27-08 27-06 27-05 27-03
480000 482000 484000 486000 470000 472000 474000 476000 478000	469199 471110 473020 474930 476840 478749 480659 482567 484476 486383	30.74 30.74 30.73 30.73 30.72 30.71 30.71 30.70 30.70 30.69	4.349 - 9 4.195 4.048 3.908 3.775 3.647 3.526 3.420 3.319 3.222	89122. 90365. 91607. 92851. 94094. 95339. 96583. 97541. 98480. 99419.	1.431 +15 1.381 1.334 1.288 1.285 1.204 1.165 1.131 1.099 1.067	2641. 2659. 2677. 2695. 2713. 2740. 2762. 2775. 2787.	2.407 + 1 2.340 2.275 2.213 2.153 2.096 2.040 1.990 1.992 1.895	1.097 + 2 1.137 1.177 1.218 1.260 1.303 1.347 1.388 1.429 1.471	27.01 27.00 20.98 26.97 26.95 26.93 26.92 26.90 26.87
500000 502000 504000 504000 508000 510000 512000 514000 514000	488291 490198 492105 494012 495918 497824 499729 501634 503539 505443	30.68 30.68 30.67 30.67 30.66 30.66 30.65 30.64 30.63	3.129 - 9 3.039 2.952 2.869 2.789 2.711 2.637 2.565 2.496 2.429	100358. 101298. 102238. 103178. 104119. 105000. 106002. 106943. 107886. 108828.	1.037 +15 1.008 9.801 +14 9.532 9.273 9.022 9.761 8.549 8.324 8.108	2800. 2813. 2826. 2839. 2851. 2864. 2876. 2889. 2901. 2914.	1.850 + 1 1.807 1.765 1.764 1.684 1.646 1.609 1.573 1.539 1.505	1.513 + 2 1.557 1.601 1.647 1.693 1.780 1.787 1.836 1.886	26.86 26.84 26.83 26.81 26.80 26.76 26.76 26.75 26.73 26.73

TABLE V.—Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS

Aiti	tude	Accel.	Specific	Pressure scale	Number	Particle	Collision	Mean free	Molecular
Ż, ft	: H, ft	gravity g, ft sec ⁻²	weight ω, ib ft ⁻² sec ⁻²	height	density	speed V, ft sec	frequency ν , sec	path L, ft	weight M
520000 522000 524000 526000 526000 530000 534000 534000 538000	507347 509251 511154 513057 514960 516862 518764 520666 522567 524468	30.63 50.62 30.62 30.61 30.60 30.59 30.59 30.59 30.58	2.364 - 9 2.302 2.242 2.187 2.186 2.087 2.080 1.993 1.948 1.904	109771. 110714. 111658. 112438. 113074. 113711. 114348. 115623. 115623.	7.899 +14 7.697 7.592 7.324 7.160 7.002 6.847 6.551 6.409	2926. 2938. 2950. 2960. 2969. 2977. 2985. 2973. 3001. 3009.	1.472 + 1 1.441 1.441 1.381 1.354 1.328 1.202 1.277 1.222	1.987 + 2 2.039 2.092 2.143 2.192 2.242 2.292 2.344 2.396	26.70 26.68 26.67 26.65 26.63 26.62 26.60 26.58 26.57 26.55
540000 542000 544000 546000 550000 552000 552000 556000 558000	526368 528268 530168 532067 533966 535865 537764 539662 541559 543456	30.57 30.56 30.56 30.55 30.55 30.54 30.54 30.53 30.52 30.52	1.862 - 9 1.820 1.780 1.741 1.703 1.666 1.629 1.594 1.560	116898. 117536. 118175. 118813. 119452. 120091. 12070. 121370. 122010. 122626.	6.270 +14 6.136 6.005 5.877 5.753 5.632 5.514 5.399 5.287 5.169	3017. 3025. 3032. 3048. 3048. 3056. 3064. 3072. 3080. 3087.	1.205 + 1 1.182 F.160 1.138 1.017 1.007 1.076 1.057 1.037 1.017	2.503 + 2 2.558 2.614 2.671 2.720 2.787 2.847 2.907 2.907 2.969 3.037	26.53 26.52 26.50 26.48 25.47 26.45 26.45 26.42 26.41 26.45
560000 562000 564000 566000 576000 572000 574000 576000	545353 547250 549146 557042 552937 554833 556727 558622 560516 562410	30.51 30.51 30.50 30.50 30.49 30.48 30.48 30.47 30.47	1.497 - 9 1.467 1.439 1.410 1.383 1.356 1.356 1.330 1.304 1.279 1.254	123081. 123536. 123991. 124447. 124902. 125358. 125814. 126727. 126727.	5.071 +14 4.075 4.882 4.701 4.701 4.614 4.529 4.445 4.364 4.284	3092. 3098. 3103. 3109. 3114. 3120. 3125. 3130. 3136. 3141.	9.991 + 0 9.820 9.652 9.488 9.328 9.170 9.016 8.865 8.717 8.573	3.095 + 2 3.155 3.215 3.276 3.339 3.402 3.466 3.531 3.597 3.664	26.43 26.41 26.39 26.37 26.35 26.38 26.32 26.30 26.28 26.26
\$80000 \$82000 \$84000 \$86000 \$90000 \$92000 \$94000 \$94000 \$98000	564303 566196 568089 569981 571873 573765 575656 577547 579437 581328	30.46 30.45 30.44 30.43 30.43 30.42 30.42 30.41 30.40	1-234 - 9 1-207 1-184 1-162 1-169 1-119 1-098 1-077 1-057	127640. 128097. 128554. 129011. 129468. 129926. 130383. 130841. 131299. 131757.	4.206 +!4 4.129 4.055 3.981 3.910 3.840 3.771 1.704 3.639 3.575	3146. 3152. 3157. 3162. 3168. 3173. 3178. 3189. 3194.	8.431 + 0 8.291 8.155 8.022 7.891 7.762 7.637 7.513 7.392 7.274	3.732 + 2 3.801 3.801 3.942 4.014 4.008 4.162 4.237 4.313	26.24 26.23 26.21 26.19 26.17 26.15 26.13 26.12 26.10 26.08
600000 602000 604000 606000 610000 612000 614000 616000 618000	583217 585107 586996 580885 590773 592661 594549 596437 598324 600210	30.40 30.39 30.39 30.38 30.37 30.37 30.37 30.35	1.018 - 9 9.997 -10 9.81% 9.635 9.459 9.120 8.955 8.794 8.637	132216. 132674. 133133. 133592. 134050% 134510. 134969. 135428. 135888. 136348.	3.512 +14 7.850 3.390 3.331 3.273 3.217 3.161 3.107 3.054 3.002	31.99. 32.04. 32.10. 32.15. 32.20. 32.25. 32.31. 32.36. 32.41. 32.46.	7.158 + 0 7.044 6.972 6.923 6.715 6.610 6.506 6.405 6.306 6.208	4.470 + 2 4.549 4.630. 4.712 4.795 4.880. 4.965. 5.052 5.140 5.229	26.06 26.04 26.03 26.01 25.99 25.97 25.95 25.94 25.92 25.90
520000 622000 624000 626000 628000 630000 632000 634000 636000 638000	602097 603983 605868 607753 609638 611523 613407 615291 6171775 619058	30.34 30.34 30.33 30.35 30.35 30.31 30.31 30.30 30.30	8.483 -10 8.332 8.186 8.049 7.914 7.761 7.652 7.524 7.399 7.277	136808. 137269. 137688. 138024. 138361. 138697. 139034. 139370. 139707.	2.951 +14 2.901 2.853 2.807 2.763 2.719 2.676 2.634 2.592 2.551	3251. 3256. 3261. 3265. 3268. 3272. 3276. 3279. 3283. 3287.	6.112 + 0 6.018 5.927 5.839 5.753 5.668 5.584 5.502 5.422 5.343	5.319 + 2 5.411 5.502 5.591 5.682 5.773 5.866 5.960 6.055 6.152	25.88 25.86 25.85 25.83 25.81 25.79 25.77 25.76 25.74
640000 642000 644000 646000 648000 650000 652000 654000 658000	620941 622823 624705 626587 628466 630349 632230 634,111 635991	30.29 30.28 30.27 30.27 30.26 30.25 30.25 30.25 30.24	7.155 -10 7.038 6.923 6.809 6.697 6.588 6.481 6.375 6.272 6.170	140381 • 140718 • 141056 • 141393 • 14173 • 142068 • 142744 • 143082 • 143420 •	2.511 +14 2.472 2.439 2.396 2.359 2.322 2.286 2.251 2.217 2.183	3290. 3294. 3298. 3301. 3305. 3309. 3312. 3316. 3319. 3323.	5.265 + 0 5.188 5.113 5.039 4.966 4.895 4.825 4.756 4.688 4.621	6.250 + 2 6.349 6.449 6.551 6.654 6.759 6.865 6.972 7.081 7.191	25.70 25.68 25.67 25.65 25.63 25.61 25.60 25.58 25.56 25.56
660000 662000 664000 666000 668000 672000 672000 674000 676000 678000	639750 641629 643507 645385 647263 649141 651018 652895 654772 656648	30.23 30.22 30.22 30.21 30.21 30.20 30.20 30.19 30.18 30.18	6.071 -10 5.973 5.877 5.782 5.690 5.599 5.510 5.422 5.336 5.252	143758 - 144096 - 144435 - 144773 - 145112 - 145451 - 145790 - 146129 - 146807 - 146807	2.149 +14 2.116 2.084 2.053 2.022 1.991 1.961 1.932 1.903 1.874	3327. 3330. 3334. 3337. 3341. 3345. 3348. 3352. 3359.	4.491 4.491 4.427 4.365 4.303 4.243 4.183 4.183 4.067 4.011	7.303 + 2 7.416 7.530 7.646 7.764 7.883 8.004 8.126 8.249 8.375	25.52 25.51 25.49 25.47 25.45 25.44 25.42 25.40 25.38 25.36

7	```		T	Description	i	r -		1	 ~_
	Altitude Z, ff H,	Accel. due to gravity	Specific weight 2 w, lb ft ⁻² sec ⁻²	Pressure scale height	Number density n, fr ⁻³	Particle ,speed V. ft sec'	frequency		Molecular weight M
ŀ	Z, 11 17,	' g, ft sec	210,1011 366	Ή _P , ff	11, 11	, 11 SEC	. », sec	Ē, II	I 1 V)
	680000 6585 682000 6603 684000 6644 688000 6648 692000 6678 692000 6677 694000 6718 694000 6735 698000 6735	24 30.17 99 30.17 74 30.16 49 30.16 23 30.15 71 30.14 45 30.13	5.169 -10 5.087 5.007 4.929 4.852 4.776 4.628 4.557 4.486	147.147. 147.486. 147826. 148506. 148506. 148506. 149136. 14926. 149866. 150207.	1-846 +14 1-819 1-792 1-765 1-739 1-713 1-664 1-664 1-639 1-615	3362. 3366. 3370. 3373. 3277. 3380. 3384. 3391. 3391.	3.955 + 0 3.900 3.847 3.794 3.741 3.650 3.650 3.590 3.541 3.493	8.501 + 2 8.630 8.760 8.892 9.025 9.160 9.297 9.435 9.575 9.717	25.35 25.33 25.31 25.29 25.28 25.24 25.24 25.22 25.21 25.19
	700000 6772 702006 6810 704000 6810 704000 6810 705000 6847 711000 6884 712000 6884 714000 6922 718000 6940	63. 30.12 35. 30.11 96. 30.11 78. 30.10 49. 30.10 19. 30.09 89. 30.08 59. 30.08 29. 30.07	4.417 -10 4.349 4.282 4.216 4.152 4.088 4.026 3.905 3.905 3.845	150547. 150888. 151229. 151570. 151911. 152252. 152593. 152935. 152936.	1-592 +14 1-569 1-546 1-523 1-501 1-800 1-459 1-436 1-417 1-397	3398. 3401. 3405. 3409. 3412. 3416. 3419. 3423. 3423. 3426. 3430.	3.446 + 0 3.353 3.353 3.308 5.264 3.220 3.177 3.135 3.093 3.052	9.861 + 2 1.001 + 3 1.015 1.030 1.045 1.061 1.076 1.092 1.108 1.124	25.17 25.15 25.13 25.12 25.10 25.08 25.06 25.06 25.05 25.03
	720000 6959 722000 6978 724000 7015 728000 7015 728000 7053 732000 7071 734000 7090 738000 71127	36 30.06 04 30.05 72 30.05 39 30.04 30.03 30.03 30.02	3.787 -10 3.730 3.674 3.619 3.565 3.511 3.459 3.407 3.357 3.307	153960. 154302. 154644. 1554986. 155328. 155670. 156013. 156356. 156698.	1.377 +14 1.357 1.338 1.319 1.201 1.282 1.264 1.247 1.229 1.212	3433. 3437. 3440. 3447. 3450. 3457. 3461. 3464.	3.012 + 0 2.972 2.933 2.894 2.857 2.819 2.782 2.7746 2.711 2.675	1.140 + 3 1.156 1.173 1.190 1.207 1.224 1.224 1.225 1.227	24.99 24.98 24.96 24.94 24.92 24.90 24.89 24.87 24.85 24.83
	740000 7146 742000 7165 744000 7165 745000 7202 748000 7220 750000 7239 752000 7276 754000 7276 756000 7275 758000 7314	02 30.00 67 30.00 31 29.99 95 29.98 29.98 22 29.97 85 29.97	3.258 -10 3.210 3.163 3.116 3.071 3.026 2.981 2.938 2.896 2.855	157384. 157727. 158070. 158414. 158757. 159101. 159788. 160088. 160369.	1.195 +14 1.179 1.162 1.146 1.131 1.115 1.100 1.085 1.070 1.056	3468. 3471. 3475. 3478. 3482. 3485. 3488. 3492. 3498.	2.64.1 + 0 2.607 2.573 2.540 2.508 2.476 2.444 2.413 2.383 2.353	1.313 + 3 1.332 1.350 1.369 1.408 1.408 1.427 1.447 1.467	24.82 24.80 24.76 24.76 24.75 24.73 24.71 24.69 24.68 24.66
	760000 7332 762000 7351 764000 7369 766000 7369 766000 7407 770000 7425 772000 7444 774000 7462 776000 7500	16 29.93 77 29.92 36 29.92 96 29.91	2.815 -10 2.775 2.736 2.698 2.660 2.623 2.586 2.555 2.5514 2.480	160650. 160932. 161213. 161495. 161776. 162058. 162340. 162622. 162904. 163186.	1.042 +14 1.028 1.015 1.001 9.882 +13 9.752 9.625 9.499 9.375 9.253	3500. 3503. 3506. 3509. 3511. 3514. 3517. 3520. 3522. 3525.	2.324 + 0 2.275 2.266 2.238 2.21:1 2.183 2.157 2.130 2.104 2.078	1.506 + 3 1.527 1.547 1.568 1.588 1.609 1.631 1.652 1.674	24.64 24.62 24.60 24.59 24.57 24.55 24.53 24.52 24.50 24.48
	780000 75.18 732000 75.37 784000 75.55 786000 75.55 788000 75.93 790000 76.30 794000 76.80 794000 76.87	31 29.89 89 29.88 46 29.88 03 29.87 17 29.86 73 29.86	2.445 -10 2.411 2.378 2.345 2.345 2.281 2.220 2.219 2.188 2.158	163468. 163750. 164033. 164315. 164598. 164881. 165163. 165729. 166012.	9.133 +13 9.015 8.898 8.783 8.670 8.559 8.449 8.340 8.234 8.129	3528. 3530. 3533. 3536. 3539. 3541. 3544. 3547. 3549.	2.053 + 0 2.028 2.028 1.979 1.975 1.931 1.908 1.885 1.862 1.840	1.719 + 3 1.741 1.764 1.787 1.810 1.834 1.858 1.882 1.906 1.931	24.46 24.45 24.43 24.41 24.39 24.38 24.36 24.34 24.32 24.30
	800000 7704 805000 7750 810000 7797 815000 7889 825000 7889 835000 8028 840000 8028 840000 8074 845000 8120	29.83 29.81 41 29.80 71 29.77 29.77 24 29.76 48 29.74 29.73	2.129 -10 2.057 1.988 1.922 1.858 1.796 1.737 1.680 1.625 1.572	166295. 167704. 167713. 168422. 169132. 169843. 170555. 171266. 171979. 172692.	8.025 +13 7.772 7.529 7.294 7.068 6.849 6.638 6.435 6.239 6.049	3555. 3561. 3568. 3575. 3582. 3588. 3595. 3602. 3608.	1.818 + 0 1.764 1.7712 1.667 1.613 1.566 1.521 1.477 1.434 1.393	1.956 + 3 2.019 2.085 2.152 2.221 2.292 2.364 2.439 2.516 2.595	24.29 24.24 24.20 24.15 24.11 24.07 24.02 23.98 23.98 23.98
	850000 8167 855000 8213 860000 8259 865000 8355 870000 8351 875000 8493 885000 8493 885000 8535 885000 8585	29.69 29.68 29.66 29.65 29.65 29.63 29.62 29.61 29.61	1.521 -10 1.472 1.424 1.379 1.335 1.292 1.251 1.212 1.173	173406 174120 174835 175551 176267 176267 177701 178419 179138 179857	5.866 +13 5.690 5.355 5.195 5.082 4.893 4.750 4.611 4.477	3622 - 3628 - 3635 - 3641 - 3648 - 3655 - 3661 - 3668 - 3674 - 3681 - 36	1.354 + 0 1.315 1.278 1.242 1.208 1.174 1.141 1.110 1.079 1.050	2.676 + 3 2.759 2.844 2.931 3.021 5.113 3.208 3.305 3.404 3.506	23.85 23.80 23.76 23.71 23.62 23.58 23.58 23.54 23.49 23.45

TABLE X.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

` }	tude	Accel. due to gravity	Specific weight ω , lb ft ⁻² sec ²	Pressure scale height	Number density	Particle speed	Collision frequency	Mean frec path	weight
Z, ft	H, ff	g, ft. sec.	ω, Ib ff - sec -	H _p , ff	n, fit ⁻⁸	∇, ft sec '	ν, sec '	L, ff	. M
900000 905000 910000	862758 867352 871943	29.57 29.55 29.54	1.101 -10 1.067 1.034	180577. 181297. 182018.	4.347 +13 4.222 4.100	3687. 3694. 3700.	1.021 + 0 9.935 - 1 9.667	3.611 + 3 5.718 3.828	23.40 23.36 23.31
915000	876533	29.53	1.002	182740.	3.963	3707.	9.407	3.940	23.27
920000 925000	881120 885705	29.51 29.50	9.710 -11 9.412	183462. 184185.	3.870 3.760	3713. 3720.	9.155 8.911	4.056 4.174	23.23
930000	890289	29.48	9 i. 125	184908.	3.654	3726.	8.674	4.296	23.14
940000	895870 299449	29.47	8.647 8.579	185633. 186357.	3.551 3.452	3732. 3739.	8.445 8.222	4.420 4.547	23.09
945000	904025	29.54	8.320	187082.	3.395	37.45.	8.007	4.678	23.00
950000 955000	908600 913173	29.43	8.070 -11 7.828	187808. 188535.	3.262 +13 3.172	3752. 3758.	7.798 - 1 7.595	4.811 + 3	22.96
960000	917743	. 29.40	7.594	189262.	3.085	3758. 3764.	7.595 7.398	5-088	22.87
965000 970000	922312 926878	29.39 29.38	7.368 7.150	189990. 190718.	3.000 2.918	3771. 3777.	7.207	5.232 5.379	22.83
975000	931442	29.36	6.938	191447.	2.839	3784.	6.843	5.529	22.74
980000	936004	29.35	6.734	192176.	2.762	3790. 0	6.668 6.500	5.663 5.840	22.70
985000 990000	940564 945122	29.34	6.537 6.350	192890.	2.687 2.617	3796. 3801.	6.337	5.998	22.65
995000	949678	29.31	6.169	194127.	2.548	3806.	6.179	6.160	22.56
1000000 1005000	954232 958784	29.30 29.28	54993 -11 5 ₄ 823	194746.	2.481 +13 2.417	3812 3817.	≈ 6.026 - 1 5.877	6.325 + 3	22.52
1910000	963333	29.27	5.658	195996.	2.354	3822.	5.732	6.668	22.43
1015000	96788.1	29.26	5.498	196607.	2.293	3827	5.591	6 4 8 4 5 7 • 02 6	22.39
1020000 1025000	972426 976970	29.24	5.343 5.193	197229. 197850.	2.234 2.176	3832. 3837.	5.454	7.212	22.35
1030000	981511	29.22	5.048	198473.	2-121	3843.	5.192	7-401	22.26
1035000	986050 990588	29.20 29.19	4.907 4.771	199096. 199719.	2.067	3848. 3853.	5.066	7.595 7.793	22.21
1045000	795123	29.18	4.639	200343.	1.963	3858.	4.825	7.996	22.13
1050000 1055000	999656 1004187	29.16 29.15	4.510 =1:1 4.386	200967. 201592.	1.913. +13	3863. 3868.	4.709 - 1 4.596	8.204 + 3 8.416	22.08
1060000	1006715	29.14	4.266	202218.	1.818	3873.	4.487	8.633	22.00
1065000	1013242	29.12	4.149	202844	1-773	3879.	4.380	8.854	21.95
1070000 1075000	1017767 1022290	29.11	4.035 3.925	203470.	1.728 1.685	3884. 3889.	4.277 4.176	9.081 9.312	21.91
1080000	1026810	29.08	3.819	204724.	1.644	3894.	4.076	9.549	21.82
1085000 1090000	1031329 1035845	29.07	3.715 3.615	205352. 205981.	1.603	3899. 3904.	3.982 5 1 3.889	9.791 1.004 + 4	21.78
1095000	1040360	29.04	3.518	2066.10	1.525	3909.	3.798	1.029	21.70
1100000 1105000	1044872 1049382	29.03 29.02	3.423 -11 3.332	207239. 207869.	1.488 +13	3914. 3919.	3.710 - 1 3.625	1.055 + 4	21.65 21.61
1110000	1053891	29.00	3.243 3.157	208500. 209131.	1.416	3924.	3.541	1.108	21.57
11:15000	1058397	28.99	3.157	209131.	1.382	3929. 3934.	3.460 3.380	1 • 136 1 • 164	21.52 21.48
1120000 1125000	1062901 1067403 1071903	28.98 28.96	3.073 2.992	210394	1.316	3939.	3.303	1.193	21.44
1130000	1071903	28.95	2.913 2.836	211027.	1.284	3944.	3.228	1.222	21.40
1135000 1140000	1076401 1080897	28.94 28.92	2.836	211660.	1.254	3949. 3954.	3.155 3.083	1.252	21.36
1145000	1085391	28.91	2.689	212294. 212928.	1.195	3959.	3.014	1.314	21.27
1150000 1155000	1089883 1094573	28.90 28.88	2.619 -11. 2.551	213562	1.166 +13	3964. 3969.	2.946 - 1 2.880	1.346 + 4	21.23
1160000	1098861	28.87	2.485	214833.	1.112	3974.	2.816	. 1.411	21.15
1165000	1103346	28.86	2.421	215469-	1.086	3979.	2.753	1.445 1.480	21.10
1170000 1175000	1107830	28.85 28.83	2.358 2.278	216106. 216743. 217381.	1.060	3984. 3989.	2.692 2.632	1:-516	21.06
1180000	1112312 1116792	28.82	2.239 2.182	217381.	1.012	3994.	2.632 2.574	1.552	20.98
1185000 1190000	1121269 1125745	28.81 28.79	2.182 2.126	218019. 218658.	9.881 +12	3999. 4004.	2.518 2.462	1.588 1.626	20.94
1195000	1130218	28.78	2.072	219297.	9.430	4009.	2.408	1.665	20.86
1200000	1134690	28.77	2.019 -11	219936. 220577.	9.213 +12 9.001	40145 : 4019.	2.356 - 1 2.305	1.704 + 4 ·	20.82 20.78
1205000 1210000	1139159 1143627	28.75	1.968	220577.	8.796	4014.	2.305	1.785	20.78
1215000	1148092	28.73	1.871	221859.	8.595	4029.	2.206	1.826	20.69
1220000	1152556	28.71 28.70	1.825	222500. 223143.	8.400 8.209	4034. 4038.	2.159 2.112	1.869 1.912	20.65
1230000	1161476	28.69	1.734	223786.	8.024	4043.	2:067	. 1,-956	. 20.57
1235000 1240000	1165934 1170389	28.68	1.691	224429. 225073.	7.843 7.667	4048. 4053.	2.023 1.980	2.001 2.047	20.53
1245000	1174842	28.66 28.65	1.608	225717.	7.495	4058.	1.938	2.094	20.46
1250000	1179294	28.64	1.568 -11	226362.	7.327 +12 7.164	4063. 4068.	1.897 - 1 : 1.857	2.142 + 4 2.191	20.42 20.38
1255000 1260000	1183743	28.62 28.61	1.530 1.492	227007. 227653.	7.005	4073.	1.818	2.241	20.34
1265000	1192635	28.60	1.456	228300.	6.850	4077.	4.779	2%291	20.30
1270000 1275000	1197079	28.58	1.420 1.386	228945. 229594.	6.699	4082. 4087.	1.742 1.706	2.343 2.396	20.26
1280000	1205959	28.56	1.352	230242.	6.407	4092.	1.670	2.450	20,18
1285000	1210396	28.55	1.319	230890.	6.267	4097. 4102.	1.636	2.505	20.15 20.11
1290000 1295000	1214632 1219265	28.53 28.52	1.287	231539. 232169.	6.130 5.996	4102.	1.602	2.561 2.618	20.07
			'''				,	-	
		1	L	L	L	L		L	

△ TABLE V.—Continued :

Àltít	tude =	Accel.	Specific weight	Pressure scale	SNumber density u	Particle speed	Collision frequency	Mean free	Molecula weight
Z, ft	H, ff	gravity g, ft sec ⁻²	ω, lb ft ⁻² sec ⁻²	height H _P , ft	n, ft	∇, ft sec '		- Egfi	M
1300000 1305000 1315000 1315000 1325000 1325000 1335000 1340000	1223696 1228125 1232552 1236976 1241401 1245822 1250241 1254658 1259074	28.51 28.49 28.48 28.46 28.46 28.43 28.43	1.226 -11 1.197 1.168 7.141 1.114 1.008 1.063 1.038	232839. 233489. 234140. 234730. 235266. 235803. 236340. 236878. 237415.	5.866 +12 5.739 5.615 5.495 5.380 5.267 5.157 5.049 4.944	4111. 4116. 4121. 4125. 4129. 4133. 4136. 4140.	1.537 - 1 1.505 1.474 1.474 1.415 1.387 1.359 1.332 1.305	2.676 + 4 2.735 2.795 2.856 2.917 2.980 3.084 3.109 3.175	20-03 19-99 19-96 19-92 19-88 19-85 19-81 19-77
1345000 135000 135500 136000 136000 1375000 1375000 1380000 1380000 1390000 1390000	1263487 1267898 1272307 1276715 1281120 126523 1289925 1298324 1298721 1303117 1307510	28.39 28.37 28.37 28.35 28.35 28.32 28.30 28.29 28.29 28.28	9.912 -12 9.464 -12 9.462 9.245 9.034 8.828 8.432 8.432 8.241 2.055 7.873	237954. 238492. 239032. 239571. 240111. 240651. 2411733. 242275. 242275. 243359.	4.841 4.741 +12 4.642 4.556 4.553 4.361 4.271 4.184 4.098 4.015 3.933	4148. 4152. 4155. 4159. 4167. 4167. 4170. 4174. 4178. 4181.	1.279 1.25k - 1 1.229 1.205 1.181 1.158 1.135 1.113 1.091 1.070	3.311	19.66 19.63 19.59 19.56 19.52 19.49 19.45 19.42 19.43
140000 140500 141500 141500 142500 142500 143500 143500 144500	1311902 - 1316291 1320679 1325064 1329448 1333829 1338209 1342586 1346962 1351336	28.25 28.24 28.23 28.21 28.20 28.19 28.18 28.16 28.16	7.696 -12 7.523 7.355 7.190 7.030 6.874 6.721 6.572 6.427 6.285	243902. 24445. 24533. 245078. 246623. 247168. 247714. 248260. 248806.	3.853 +12 3.775 2.698 3.823 3.550 3.479 3.409 3.341 3.274 3.208	4189. 4193. 4196. 4200. 4204. 4207. 4211. 5215. 4219.	1.028 - 1 1.008 9.887 - 2 9.696 9.509 9.326 9.146 8.971 8.779 8.631	4.074 + 4 4.158 4.244 4.332 4.421 4.512 4.604 4.698 4.794 4.892	19.31 19.28 19.25 19.21 19.18 19.15 19.12 19.08 19.05 19.02
1450600 1455000 1465000 1465000 1475000 1475000 1485000 1485000	1355708 1360077 1364445 1368811 1373175 1377537 1381897 1386255 1390611	28.13 28.11 28.10 28.09 28.07 28.05 28.05 28.05 28.02 28.02	6.146 -12 6.011 5.879 5.751 5.625 5.503 5.383 5.266 5.152 5.041	249353. 249901. 250449. 250997. 251545. 252095. 252644. 253194. 253744.	3.144 +12 3.082 3.021 2.961 2.902 2.845 2.789 2.734 2.680 2.627	4224. 4230. 4233. 4241. 4241. 4248. 4252. 4255. 4259.	8.466 - 2 8.305 8.147 7.992 7.841 7.693 7.547 7.405 7.266 7.130	4.992 + 4 5.093 5.196 5.303 5.408 5.517 5.628 5.741 5.857 5.974	18.99 18.95 18.92 18.89 18.86 18.83 18.77 18.77
1500000 1505000 1515000 1515000 1525000 1525000 1535000 1535000 1545000	1399317 1403668 1408016 1412362 1416707 1421049 1425390 1429728 1434065 1438400	28.00 27.99 27.97 27.96 27.95 27.94 27.92 27.91 27.90 27.89	4.932 -12 4.526 4.722 4.621 4.522 4.425 4.425 4.331 4.239 4.149 4.061	254846. 255398. 255950. 256502. 257055. 257608. 258162. 258716. 259270. 259825.	2.576 12 2.526 2.476 2.428 2.381 2.335 2.290 2.245 2.202 2.160	4263. 4266. 4270. 4274. 4277. 4281. 4288. 4292. 4295.	6.996 - 2 6.865 6.737 6.612 6.489 6.368 6.250 6.134 6.021 5.910	6.093 + 4 6.338 6.338 6.392 6.723 6.855 6.990 7-128 7-268	18.68 18.65 18.62 18.59 18.56 18.53 18.51 18.48 18.45
1550000 1555000 1560000 1565000 1575000 1575000 1585000 1580000 1595000	1442733 1447063 1451392 1455719 1460044 1464367 1466689 1477325 1481641	27.87 27.86 27.85 27.84 27.82 27.81 27.80 27.79 27.78 27.76	3.975 -12 3.892 3.810 3.730 3.652 3.575 3.5501 3.428 3.356 3.287	260381. 260936. 261493. 262049. 262606. 263164. 263722. 264280. 264839. 265398.	2.118 +12 2.077 2.037 1.999 1.960 1.923 1.886 1.850 1.815	#299. #303. #306. #310. #314. #317. #321. #328. #332.	5.801 - 2 5.695 5.590 5.488 5.387 5.289 5.193 5.098 5.098 4.915	7.411 + 4 7.556 7.703 7.654 8.007 8.162 8.321 8.482 8.482 8.484 8.613	18.50 18.37 16.34 18.31 18.29 18.26 18.21 18.18
1600000 1605000 1610000 1615000 1625000 1635000 1635000 1640000 1645000	1485754 1490266 1494575 149883 1503189 1507493 1511795 1516095 1520393 1524689	27.75 27.74 27.73 27.71 27.70 27.69 27.68 27.66 27.65 27.65	3.219 -12 3.152 3.087 3.024 2.961 2.901 2.841 2.783 2.727 2.673	265957. 266517. 267077. 267638. 268199. 268761. 269323. 269886. 270449. 270871.	1.714 1.682 1.650 1.650 1.589 1.559 1.559 1.530 1.501 1.474	#335. #339. #342. #346. #350. #353. #357. #360. #364.	4.826 - 2 4.739 4.653 4.570 4.487 4.407 4.328 4.250 4.174 4.101	8.983 + 4 9.156 9.332 9.511 9.693 9.878 1.007 + 5 1.026 1.045	18.13 18.11 18.08 18.06 18.04 18.01 17.99 17.96 17.94 17.92
1450000 1455000 1465000 1465000 1475000 1475000 1480000 1480000 1495000	1528983 1533276 1537566 1541855 1546142 1550426 1554709 1556790 1563269 1567546	27.63 27.61 27.60 27.59 27.58 27.57 27.55 27.55 27.54 27.53 27.52	2.620 -12 2.568 2.517 2.468 2.419 2.372 2.325 2.280 2.235 2.192	271282. 271692. 272103. 272514. 272926. 273337. 273749. 274162. 274574. 274987.	1.446 +12 1.421 1.396 1.371 1.346 1.522 1.298 1.275 1.252	4369. 4371. 4373. 4376. 4378. 4388. 4383. 4385. 4387.	4.029 - 2 3.958 3.889 3.821 3.75b 3.689 3.624 3.561 3.499	1.084 + 5 1.104 1.124 1.145 1.166 1.187 1.209 1.231 1.254	17.90 17.87 17.85 17.83 17.81 17.78 17.76 17.74 17.72

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TABLE V.-Continued
GEOMETRIC AUTITUDE, ENGLISH UNITS

Altitude	Accel. due to	Specific weight	Pressure scale height	 Number density 	Particle speed	Collision frequency	Mean free	Molecular weight
Z, ft H, ft	gravity g, ft sec ⁻²	u, lb ft ⁻² sec ⁻²	H _P , fi	n, ft ^{-å}	∇, ft sec⁻'	ν, sec ·	L, ft	M
1700000 1571822 1705000 1576095 1710000 1580367 1715000 1580367 1720000 1588036 1725000 1593170 1735000 1597834 1745000 1605956 1745000 1605956	27.50 27.49 27.48 27.47 27.46 27.44	2.149 -12 2.107 2.066 2.026 1.987 1.989 1.911 1.874 1.838 1.803	275400. 275814. 276227. 276641. 277056. 277470. 277885. 278850. 278715. 279131.	1.207 +12 1.186 1.165 1.144 1.103 1.084 1.085 1.046 1.027	4392. 4394. 4397. 4399. 4401. 4406. 4406. 4408. 4410.	3.379 - 2 3.320 3.262 3.206 3.150 3.096 3.042 2.990 2.938 2.888	1.300 + 5 1.324 1.348 1.372 1.397 1.422 1.448 1.474 1.501	17.68 17.66 17.64 17.62 17.60 17.58 17.56 17.54 17.52 17.50
1750000 1618470 1755000 1622977 1765000 1622977 1765000 1631477 1775000 1631477 1780000 1635724 1780000 1648453 1795000 1648453 1795000 1652693	27.36 27.35 27.33 27.32 27.31 27.30 27.29	1.768 -12 1.734 1.701 1.668 1.637 1.605 1.575 1.545 1.516	279547. 279963. 280380. 280797. 281631. 282049. 282467. 282885. 283304.	1.009 +12 9.911 +11 9.735 9.563 9.395 9.229 9.066 8.907 8.750 8.596	4415. 4417. 4420. 4422. 4427. 4429. 4431. 4433. 4436.	2.838 - 2 2.789 2.741 2.694 2.648 2.603 2.558 2.515 2.472 2.429	1.556 + 5 1.584 1.612 1.641 1.674 1.701 1.731 1.762 1.794 1.826	17.48 17.46 17.45 17.45 17.41 17.39 17.38 17.36 17.34 17.32
1800000 165693T 1805000 1661166 1815000 1665400 1815000 1673862 1825000 1673862 1825000 1673862 1835000 1682317 1835000 1682317 1840000 1694785	27.26 27.25 27.24 27.23 27.21 27.20 27.19 27.18 27.17 27.15	1.459 -12 1.431 1.404 1.378 1.352 1.326 1.301 1.277 1.253	283723. 284142. 284561. 284981. 285401. 285821. 286242. 286663. 287084. 287506.	8.445 8.297 8.152 8.009 7.869 7.732 7.597 7.464 7.334 7.207	4438. 4440. 4445. 4445. 4450. 4450. 4454. 4456. 4456.	2.388 - 2 2.367 2.307 2.268 2.230 2.192 2.155 2.118 2.082 2.047	1.858 + 5 1.892 1.925 1.960 1.995 2.030 2.066 2.103 2.140 2.178	17.31 17.29 17.28 17.26 17.24 17.23 17.21 17.20 17.18
1850000 1699203 1855000 1703421 1860000 1707636 1865000 1716061 1875000 1720270 1880000 1728684 1890000 1732888 1890000 1737090	27.12 27.11 27.09 27.08 27.07	1.207 -12 1.184 1.162 1.143 1.179 1.099 1.078 1.058 1.039 1.020	287927. 288349. 288772. 289194. 289617. 290040. 290464. 290888. 291312. 291736.	7.082 +11 6.959 6.838 6.719 6.603 6.489 6.377 6.267 6.159 6.053	4461. 4463. 4466. 4468. 4470. 4475. 4477. 4477.	2.013 - 2 1.979 1.945 1.913 1.881 1.889 1.818 1.788 1.758	2.216 + 5 2.256 2.295 2.335 2.317 2.419 2.461 2.505 2.548 2.593	17-15 17-14 17-12 17-11 17-09 17-06 17-05 17-04 17-02
1900000 1741290 1905000 1745889 1910000 1753880 1915000 1753880 1925000 1758073 1925000 1766255 1935000 1776454 1935000 1776454 1945000 1774827	26.99 26.98 26.96 26.95 26.94 26.93	1.001 -12 9.825 -13 9.445 9.468 9.295 9.125 8.958 8.795 8.635 8.478	292161. 292586. 293011. 293436. 293862. 294288. 294714. 295141. 295568. 295995.	5.949 +11 5.846 5.746 5.648 5.551 5.456 5.363 5.271 5.181 5.093	4484. 4486. 4488. 4491. 4493. 4495. 4497. 4500. 4502. 4508.	1.699 - 2 1.671 1.643 1.616 1.589 1.563 1.537 1.511 1.486	2.639 + 5 2.685 2.732 2.779 2.828 2.877 2.927 2.927 2.927 3.029 3.082	17.01 17.00 16.98 16.97 16.96 16.93 16.93 16.92 16.91 16.90
1950000 1783193 1955000 1787373 1960000 1791551 1965000 1795728 1970000 1799902 1975000 1804075 1980000 1812415 1995000 181245 1995000 1816582	26.89 26.88 26.87 26.86	8.324 -13 8.173 8.025 7.880 7.738 7.601 7.467 7.335 7.206 7.079	296423. 296851. 297279. 297707. 298104. 298428. 298752. 299076. 299400. 299725.	5.006 +11 4.921 4.837 4.755 4.675 4.598 4.522 4.447 4.373 4.301	4506. 4509. 4511. 4513. 4515. 4517. 4518. 4520. 4521. 4523.	1.437 - 2 1.414 1.390 1.367 1.345 1.323 1.302 1.280 1.260 1.239	3.135 + 5 3.190 3.245 3.301 3.357 3.414 3.471 3.530 3.589 3.649	16.88 16.87 16.86 16.85 16.84 16.82 16.81 16.80 16.79 16.78
2000000 1824911 2010000 1833233 2020000 1841548 2030000 184985 2040000 186985 2050000 186648 2060000 1874733 2070000 1890546	26-79 26-76 26-74 26-72 26-69 26-67 26-65 26-62 26-60	6:954 -13 6:712 6:479 6:254 6:038 5:829 5:434 5:248 5:068	300050- 300700- 301351- 302002- 302655- 303308- 303962- 304617- 305272- 305929-	4.230 +11 4.091 3.958 3.829 3.704 3.584 3.467 3.355 3.247 3.142	4524. 4527. 4530. 4533. 4539. 4539. 4541. 4544. 4547.	1.219 - 2 1.180 1.142 1.106 1.070 1.036 1.003 9.714 - 3 9.406 9.109	3.711 + 5 - 3.836 3.966 4.099 4.237 4.380 4.527 4.678 4.834 4.995	16.77 16.75 16.72 16.70 16.68 16.66 16.64 16.62 16.60 16.58
2100000 1907803 2110000 1914052 2120000 1924294 2130000 1932529 2140000 1940757 2150000 1948978 2170000 1965398 2180000 1975392 2180000 1975397 2190000 1981789	26.53 26.51 26.48 26.46 26.44 26.41 26.39 26.37	4.895 -13 4.727 4.566 4.411 4.262 4.117 3.978 3.844 3.715 3.590	306586. 307244. 307903. 308562. 309223. 309884. 310546. 311209. 311872. 312537.	3.041 +11 2.943 2.849 2.758 2.669 2.564 2.502 2.423 2.346 2.272	4553. 4556. 4559. 4562. 4565. 4568. 4570. 4573. 4573. 4574.	8.821 - 3 8.543 8.274 8.015 7.763 7.521 7.286 7.059 6.840 6.628	5.162 + 5 5.333 5.510 5.692 5.880 6.073 6.273 6.478 6.690 6.908	16.56 16.54 16.52 16.50 16.48 16.46 16.44 16.42 16.40 16.38

TABLE ▼.—Concluded

	Alti	tude	Accel: due to	Specific weight	Pressure scale height	density	Particle speed	Collision frequency	Mean: free	Molecular weight
	Z, ft	H, ft	g, ft: sec ⁻²	weight ω, lb ft ⁻² sec ⁻²	H _P , ft	n, ft ⁻⁹	√, ff sec"	ν, sec ⁻¹	L, ft	, M , , ? :
	220000 221000 222000 223000 224000 225000 225000 227000 227000 229000	1989974 1998152 2006323 2014487 2022643 2030793 2038936 2047071 2055199 2063321	26.32 26.30 26.28 26.25 26.23 26.21 26.19 26.16 26.14 26.12	3.470 -13 3.354 3.242 3.134 3.135 2.929 2.738 2.648 2.561	313202. 313868. 314535. 315202. 315871. 316540. 317210. 317881. 318552.	2.200 +11 2.131- 2.064 2.000 1.937 1.877 1.819 1.762 1.708 1.655	#582. #588. #591. #593. #599. #599. #605. #608.	6.424 - 3 6.225 6.034 5.689 5.670 - 5.697 5.167 - 5.011 4.859	7.133 + 5 7.365 7.603 7.849 8.102 8.362 8.630 8.906 9.190 9.483	16.36 16.34 16.32 16.31 16.29 16.27 16.24 16.22 16.20 16.18
,	2310000	2079543 2079543 2087643	26.10 26.07 26.05	2.477 -13 2.396 2.317	319898. 320572. 321247.	1.555 1.507	4611. 4614. 4616.	4.713 - 3 4.571 4.434	9.784 + 5 1.009 + 6 1.041	16.16. 16.14 16.12
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Table VI

SOUND SPEED, COEFFICIENT OF VISCOSITY, KINEMATIC VISCOSITY, AND THERMAL CONDUCTIVITY

English Units

Note: A one- or two-digit number (preceded by a plus or minus sign) following the initial entry of each block indicates the power of ten by which that entry and each succeeding entry of that block should be multiplied. A change of power occurring within a block is indicated by a similar notation.

TABLE XXI
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

2		15 J.	<u> </u>	NTIAL ALTIS	73.5	ISTI ONITS		
Altit	tude	Sound speed	Coefficient	of viscosity	Kinematic	visćosity	Thermal c	onductivity
н, п	Z, ff	C _s , ft sec ⁻¹	μ , lb ft sec sec μ	$\frac{\mu}{\mu_0}$	η , fi 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k, BTŲ ft ^{-l} sec ^{-l} (OR) ^{-l}	k ko
-16500 -16400 -16300 -16300 -16100	-16487 -16387 -16287 -16187 -16088	1178.08 1177.71 1177.35 1176.99 1176.62	1.3050 5 1.3050 1.3044 1.3038 1.3032	1.08585 + 0 1.08534 1.08483 1.08433 1.08382	1.0806 - 4 1.0830 1.0853 2.0877 1.0900	6-87302 - 1 6-88789 6-90281 6-91777 6-93276	4.4736 — 6 4.4712 4.4688 4.8663 4.4639	1.09985: + 0 1.09926 1.09866 1.09807 1.09747
	-15988 -15888 -15788 -15686 -15583 -1589 -15289 -15189 -15039	1176-26 1175-89 1175-53 1175-16 1174-80 1174-44 1174-07 1173-71 1173-34 1172-97	1.3026 -5 1.3020 1.3014 1.3007 1.3001 1.2995 1.2989 1.2983 1.2977	1.08531 + 0 1.08280 1.08229 1.08179 1.08128 1.08077 1.08026 1.07975 1.07924	1.092h - 4 1.0948 1.0972 1.0995 1.1019 1.1043 1.1067 1.1067 1.1116 1.1116	6.94780 - 1 6.94288 6.97800 6.99317 7.00337 7.02342 7.03891 7.05824 7.06962 7.08503	h. 6615 - 6 h. 6596 h. 4586 h. 4582 h. 5515 h. 5516 h. 4869 h. 5485 h. 6485 h. 6487	1.09688 + 0 1.09628 1.09568 1.09509 1.09889 1.09889 1.09830 1.09270 1.09210
-15000 -14900 -14900 -14900 -14900 -14900 -14900 -14900 -14100	-14989 -1489 -14790 -14590 -14590 -14390 -14290 -14190	1172.61 1172.24 1171.86 1171.51 1171.15 1170.78 1170.41 1170.05 1169.68 1169.32	1.2946 1.2940 1.2934 1.2928 1.2922 1.2916	1.07823 + 0 1.07772 1.07771 1.07670 1.07619 1.07568 1.07517 1.07466 1.07415	1.1164 - 4 1.1189 1.1213 1.1237 1.1262 1.1287 1.1311 1.1336 1.1361	7.10049 - 1 7.11599 7.13154 7.14713 7.14276 7.1044 7.10416 7.20992 7.22573 7.24158	4.4372 6 4.4348' 4.4324 5.4299 4.4275 4.4251 -4.4226 4.4202 4.4178 4.4153	1.09071 + 0 1.09031 1.08971 1.08912 1.08852 1.08792 1.08732 1.08672 1.08613 1.08553
-14000 -13900 -13600 -13700 -13600 -13500 -13400 -13300 -13200 -13100	-13991 -13891 -13791 -13691 -13591 -13491 -13292 -13192 -13092	1.168-95 1168-58 1168-22- 1167-85 1167-88 1167-11 1166-75 1166-38 1166-01 1165-65	1.2903 - 5 1.2897 1.2891 1.2885 1.2879 1.2673 1.2866 1.2860 1.2854 1.2848	1.07312 + 0 1.07261 1.07210 1.07159 1.07108 1.07057 1.07006 1.06955 1.06903 1.06852	1.1411 - 4 1.1436 1.1461 1.1486 1.1512 1.1537 1.1562 1.1568 1.1613 1.1639	7.25747 - 1: 7.27341 7.28940 7.30542 7.32150 7.33761 7.35378 7.36999 7.36024 7.40254	h.h129 — 6 h.h105 h.h080 h.h056 h.h032 h.h007 h.3983 h.3958 h.3934	1.00573 + 0 1.00533 1.00573 1.00513 1.00254 1.00194 1.00074 1.00074 1.00014
-13000 -12900 -12800 -12700 -12600 -12500 -12400 -12300 -12200 -12100	-12992 -12892 -12792 -12692 -12592 -12593 -12293 -12193 -12093	1165.28 1164.91 1164.54 1164.17 1163.84 1163.07 1162.70 1162.33	1.2842 - 5 1.2836 1.2829 1.2823 1.2817 1.2811 1.2805 1.2799 1.2792 1.2786	1.06801 + 0 1.06750 1.06678 1.06596 1.06596 1.06584 1.06493 1.06482 1.06390	1.1665 - 4 1.1691 1.1716 1.1742 1.1768 1.1794 1.1820 1.1847 1.1873 1.1873	7.41889 - 3 7.45528 7.45171 7.46820 7.46473 7.50130 7.51793 7.53460 7.55131 7.56808	4.3885 - 6 5.3861 4.3837 4.3812 4.3783 4.3763 4.3734 4.3734 4.3690 4.3666	1.0789h + 0 1.0783h 1.0777h 1.0777h 1.0775h 1.0759h 1.0753h 1.0787h 1.0787h
-12000 -11900 -11800 -11800 -11500 -11500 -11300 -11200 -11100	-11993 -11893 -11793 -11593 -11594 -11394 -11294 -11194	1161.59 1161.23 1160.86 1160.49 1160.12 1159.75 1159.38 1159.01 1158.64 1158.27	1.2780 - 5 1.2774 1.2768 1.2762 1.2765 1.2749 1.2745 1.2745 1.2737	1.08288 + 0 1.06236 1.06185 1.06183 1.06082 1.06080 1.05979 1.05927 1.05876 1.05824	1.1926 - 4 1.1952 1.1979 1.2006 1.2032 1.2059 1.2086 1.2113 1.2140 1.2140	7.58489 - 1 7.60175 7.61865 7.63561 7.65261 7.65261 7.68966 7.68676 7.70390 7.72110 7.73834	h,3617 - 6 h,3617 h,3592 h,3568 h,3519 h,3519 h,3495 h,3170 h,3486 h,3421	1.07294 + 0 1.07234 1.07174 1.07174 1.07053 1.06993 1.0693 1.06813 1.06813
-11000 -10900 -10800 -10700 -10500 -10500 -10500 -10300 -10300 -10100	-1099k -1089k -1079k -10895 -10595 -10395 -10395 -10195	1155,31	1.2718 - 5 1.27106 1.2706 1.2700 1.2687 1.2681 1.2689 1.2689 1.2689	1.05773 ± 0 1.05721 1.055670 1.05568 1.05565 1.05515 1.05463 1.05411 1.05360 1.05308	1.219k - k 1.2229 1.2249 1.2276 1.2331 1.2359 1.2387 1.2387 1.2415	7.75564 - 1 7.77298 7.77037 7.80781 7.8028 7.8228 7.86083 7.87807 7.85577 7.90351	h.3397 - 6 h.3372 h.3388 h.3323 h.3229 h.3271 i.3250 h.3225 h.3225	1.04693 + 0 1.06632 1.06572 1.06512 1.06452 1.064391 1.06371 1.06271 1.06211
-10000 -9900 -9800 -9700 -9500 -9500 -9300 -9300 -9100	-9995 -9895 -9695 -9695 -9695 -9598 -9398 -9398 -9098	1152.71 1152.34 1151.96	1.2656 - 5 1.2650 1.2634 1.2631 1.2631 1.2625 1.2619 1.2613 1.2606 1.2600	1.05256 + 0 1.05205 1.05305 1.05501 1.05504 1.04898 1.04894 1.04894 1.04894 1.04894	1.2470 - 4 1.2470 - 4 1.2527 1.2527 1.2553 1.2612 1.2612 1.2649 1.2697 1.2726	7.93130 - 1 7.94914 7.94704 7.94704 7.94878 8.00298 8.02203 8.02103 8.03728 8.05728 8.07548 8.09374	h.3152 - 6 h.3127 h.3102 h.3078 h.3053 h.3029 h.3029 h.3029 h.2980 h.2985 h.2981	1.06090 + 0. 1.06036 1.05969 1.05969 1.05789 1.05728 1.05568 1.05607 1.055547
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TABLE XI
GEOMETRIC ALTITUDE, ENGLISH UNITS

ΔItit	tude	Sound	T	of viscosity	Kinematic		Thermal	onduetivity
		speed	<u> </u>	<u> </u>	:		<u> </u>	
Z, ft	H, ft	C _s ,	μ , lb ft sec sec s	$\frac{\mu}{\mu_0}$	η, ft² sec	$\frac{\eta}{\eta_0}$	k, BTU ff ⁻¹ sec ⁻¹ (°R) ⁻¹	- <u>k</u> k ₀
-16500 -16400 -16300 -16200 -16100	-16513 -16413 -16313 -16213 -16112	1178.13 1177.76 1177.40 1177.03 1176.67	1.3057 - 5. 1.3051 1.3045 1.3039 1.3033	1.08591 + 0. 1.08580 1.08490 1.08439 1.08388	1.0827 1.0850 1.0874 1.0897	6.87108 - 1 6.88597 6.90090 6.91588 6.93089	4.4739 - 6 4.4715 4.4691 4.4666 4.4642	1.09993 + 0 1.09934 1.09874 1.09814 1.09755
-16000 -15900 -15900 -15700 -15700 -15500 -15300 -15300 -15100	-16012 -15912 -15912 -15812 -15712 -15512 -15511 -15311 -15311 -15111	1176.30 1175.9h 1175.57 1175.21 1174.8h 1174.48 1174.11 1173.75 1173.38 1173.01	1.3027 - 5 1.3020 1.3014 1.3008 1.3002 1.2996 1.2996 1.2984 1.2978 1.2978	1.08337 + 0 1.08286 1.08236 1.08185 1.08185 1.08083 1.08032 1.07781 1.07781	1.G921 - k 1.0945 1.0969 1.0993 1.1017 1.1041 1.1065 1.1089 1.1113	6.94595 - 12 6.94105 6.97137 7.00659 7.02186 7.03717 7.05252 7.06471 7.08334	4.4618 - 6 4.4569 4.4585 4.4585 4.4585 4.4496 4.4472 5.4482 4.4423	1.09695 + 0 1.09635 1.09575 1.09516 1.09456 1.09376 1.09376 1.09277 1.09217
-15000 -14900 -14900 -14700 -14600 -14500 -14500 -14200 -14100	-15011 -14911 -14811 -14710 -14510 -14510 -14310 -14210 -14110	1172.65 1172.28 1171.92 1171.55 1171.18 1170.82 1170.45 1170.08 1169.72	1.2945 - 5 1.2959 1.2953 1.2947 1.2941 1.2935 1.2929 1.2922 1.2916	1.07828 + 0 1.07777 1.07726 1.07675 1.07624 1.07573 1.07522 1.07471 1.07420	1.1162 - 4. 1.1186 1.1210 1.1235 1.1260 1.1284 1.1309 1.1339	7.09882 - 1 7.11434 7.12990 7.14551 7.16116 7.17685 7.19259 7.20837 7.22419 7.24006	4.4375 6 4.4350 4.4326 4.4302 4.4277 4.4253 4.4229 4.4204 4.4180	1.09097 + 0. 1.09037. 1.08978 1.08918 1.08858 1.08798 1.08678: 1.08678: 1.08618.
-1800 -13900 -13800 -13700 -13500 -13500 -13300 -13200 -13100	-14009 -13909 -13809 -13709 -13509 -13509 -13308 -13208 -13108	1168.98 1168.62 1168.25 1167.88 1167.51 1167.15 1167.15 1166.78 1166.41	1.2904 - 5 1.2898 1.2898 1.2879 1.2873 1.2861 1.2855 1.2848	1.07317 + 0 1.07266 1.07215 1.07164 1.07103 1.07061 1.07010 1.06959 1.06908 1.06856	1.1409 - 4 1.1434 1.1459 1.1484 1.1509 1.1535 1.1560 1.1566 1.1611 1.1637	7.25597 - 1 7.27193 7.28793 7.30398 7.32007 7.33620 7.35238 7.36861 7.36888 7.40120	4.4131 - 6 4.4107 4.4083 4.4058 4.4058 4.4034 4.3085 4.3985 4.3985 4.3936 4.3936	1.08499 + 0' 1.08439 1.08379 1.08319 1.08259 1.08199 1.08139 1.08079 1.08019
-13000 -12900 -12800 -12700 -12600 -12500 -12300 -12200 -12100	-13008 -12908 -12808 -12708 -12407 -12507 -12307 -12207 -12107	1165.31 1164.94 1164.57 1164.20 1163.83 1163.87 1163.10 1162.73 1162.36 1161.99	1.2842 - 5 1.2830 1.2830 1.2824 1.2818 1.2818 1.2801 1.2805 1.2799 1.2793	1-06805 + 0 1-06754 1-06702 1-06651 1-06600 1-06548 1-06446 1-06446 1-06394	1.1663 - 4 1.1688 1.1714 1.1740 1.1766 1.1792 1.1819 1.1845 1.1851 1.1857	7. h1756 1 7. h3397 7. h50h2 7. h6692 7. h83h7 7. 50006 7. 51670 7. 53338 7. 55012 7. 56690	h.3887 - 6 h.3838 h.3838 h.383h h.3790 h.37765 h.3716 h.3716 h.3602 h.3607	1.07899 + 0 1.07839 1.07779 1.07719 1.07659 1.07538 1.07478 1.0748
-1200 -11900 -11800 -11700 -11400 -11500 -11400 -11200 -11100	-12007 -11907 -11807 -11707 -11606 -11506 -11306 -11206 -11106	1181.62 1161.25 1160.88 1160.51 1160.14 1159.77 1159.40 1159.66 1158.29	1.2781 - 5 1.2774 1.2748 1.2742 1.2750 1.2750 1.2753 1.2737 1.2731	1.06291 + 0' 1.06280 1.06188 1.06137 1.06085 1.06034 1.05982 1.05931 1.05879 1.05827	1.1925 - 5 1.1950 1.1977 1.2005 1.2037 1.2057 1.2084 1.2111	7.58372 - 1 7.60060 7.61752 7.63449 7.65151 7.66857 7.70285 7.70285 7.72006 7.73732	h.36h3 - 6 h.3618 h.350h h.3569 h.3552 h.3521 h.3872 h.3872 h.3872 h.3872	1.07298 + 0 1.07238 1.07178 1.07118 1.07057 1.06997 1.06877 1.06876 1.06816
-11000 -10900 -10800 -10700 -10800 -10800 -10800 -10800 -10800 -10800	-11006 -10706 -10804 -10705 -10405 -10505 -10305 -10305 -10105	1157.92 1157.18 1157.18 1156.81 1156.07 1155.70 1155.33 1154.95	(.2719 - 5 1.2712 1.2700 1.2700 1.2494 1.2488 1.2481 1.2475 1.2449	1.05776 + 0 1.05724 1.05673 1.95621 1.05569 1.05518 1.05466 1.05416 1.05316	1.2193 - 4 1.2220 1.2247 1.2275 1.2302 1.2330 1.2358 1.2365 1.2443 1.2641	7.75443 - 1 7.77199 7.78940 7.80685 7.82436 7.84171 7.85952 7.87718 7.89488 7.91264	4.3398 - 6 4.3374 4.3349 4.3325 4.3500 4.3275 4.3251 4.3251 4.3262 4.3177	1-06696 + 0 1-06636 1-06575 1-06515 1-06455 1-06334 1-06274 1-06214 1-06153
-1000 -9900 -9800 -9800 -9400 -9500 -9400 -930h -9200 -9100	~10005 ~9005 ~9805 ~9705 ~9506 ~9306 ~9206 ~9106	1154.21- 1153.47 1153.47 1153.10 1152.72 1152.35 1151.40 1151.61 1151.23 1150.86	1.2456 - 5 1.2450 1.2458 1.2458 1.2455 1.2417 1.2417 1.2407 1.2400	1.05259 + 0 1.05207 1.053155 1.053103 1.05052 1.05000 1.04940 1.04940 1.049792	1.2467 - 4 1.2497 1.2525 1.25254 1.2582 1.2610 1.2639 1.2667 1.2666 1.2725	7.93044 - 1 7.94830 7.94621 7.98417 8.00218 8.032024 8.03834 8.03652 8.07474 8.09301	h.3153 - 6 h.3128 h.310h h.3079 h.305h h.3050 h.3005 h.2981 h.2986 h.2932	1.06093 + 0 1.06033 1.05972 1.05972 1.05951 1.05791 1.05730 1.05670 1.05670 1.056410
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TABLE VI.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	lude .	Sound speed	Coefficient	of viscosity.	Kinematic	viscosity	Thermal o	onductivity
H, ft	Z, ft	C _s , ft sec ⁻¹	μ , lb ft $^{-1}$ sec $^{-1}$	$\frac{\mu}{\mu_0}$	η, ft² sec⁻¹	$\frac{\eta}{\eta_0}$	k, BTU ff ⁻ sec ⁻ (°R) ⁻	<u>k</u> k <u>ö</u>
-9000 -8900 -8800 -8700 -8500 -8500 -8300 -8200 -8100	-8996 -8896 -8796 -8696 -8596 -8597 -8397 -8397 -8197	1150-47 1150-10 1149-73 1149-36 1148-98 1148-61 1148-24 1147-86 1147-89	1.2594 - 5 1.2588 1.2581 1.2575 1.2569 1.2563 1.2556 1.2556 1.2550	1.04738 + 0 1.04684 1.04583 1.04583 1.04579 1.04427 1.04375 1.04375	1.2755 - 4 1.2783 1.2812 1.2841 1.2871 1.2900 1.2929 1.2958 1.2988 1.3017	8.11205 - 1 8.13041 8.14882 8.16729 8.16729 8.20439 8.22301 8.24169 8.24169 8.27922	4.2906 - 6 4.2881 4.2857 4.2832 4.2806 4.2783 4.2734 4.2734 4.2709 4.2685	1.05486: + 0 1.05426 1.05365 1.05305: 1.05245 1.05184 1.05124 1.05063 1.05003
-8000 -7900 -7800 -7700 -7600 -7500 -7400 -7300 -7200 -7100	-7997 -7897 -7797 -7697 -7597 -7497 -7397 -7297 -7198 -7098	1 140.74 1 146.37 1 146.00 1 145.62 1 145.25 1 144.57 1 144.50 1 144.13 1 143.75 1 143.38	1.2531 - 5 1.2525 1.2519 1.2513 1.2506 1.2500 1.2487 1.2487 1.2481 1.2475	1.04219 + 07 1.04167 1.04114 1.04062 1.04010 1.03958 1.03956 1.03854 1.03854 1.038749	1.3047 4 1.3077 1.3107 1.3136 1.3136 1.3197 1.3227 1.3227 1.3287	8.29806 - 1 8.31696 8.33591 8.35592 8.37398 8.39310 6.41227 8.43150 8.45079 8.47013	N-2660 - 6 N-2635 N-2611 N-2586 N-2561 N-2537 N-2512 N-2487 N-2483 N-2483	1.04881 + 0 1.04821 1.04760 1.04760 1.04579 1.04579 1.04577 1.04457 1.04457
-7000 -4900 -6800 -6700 -6500 -6500 -6300 -6200 -6100	-6998 -6898 -6798 -698 -6598 -6398 -6298 -6198 -6098	1143.00 1142.63 1142.25 1141.88 1141.50 1141.13 1140.75 1140.37 1140.00	1.2469 - 5 1.2462 1.2450 1.2450 1.2437 1.2437 1.2431 1.2425 1.2418	1.03697 + 0 1.03645 1.03593 1.03580 1.03883 1.03884 1.03384 1.033279 1.032279	1.3348 - 4 1.3379 1.3409 1.3400 1.3471 1.3502 1.3533 1.3564 1.3595 1.3627	8.46953 - 1 8.50898 8.52849 8.54769 8.54769 8.58737 8.60711 8.62690 8.64676.	4.2413 - 6 4.2389 4.2364 4.2339 4.2315 4.2290 -4.2265 4.2216 4.2191	1.04275 + 0 1.04215 1.04154 1.04093 1.04093 1.03972 1.03971 1.03851 1.03790 1.03790
-6000 -5900 -5800 -5700 -5400 -5500 -5400 -5300 -5100	-5998 -5898 -5798 -5498 -5598 -5499 -5399 -5199 -5099	1139.25 1138.87 1138.49 1138.12 1137.74 1137.36 1136.99 1136.61 1136.23 1135.86	1.2406 - 5 1.2399 1.2393 1.2387 1.2381 1.2374 1.2368 1.2368 1.2362 1.2355 1.2349	1.03174 + 0 1.03122 1.03069 1.03017 1.02964 1.02972 1.02860 1.02807 1.02754 1.027702	1.3658 - 4 1.3690 1.3721 1.3753 1.3765 1.3816 1.3848 1.3888 1.3888	8.68664 - 1 5.70667 8.72676 8.74691 8.76712 8.76712 8.80771 8.82609 8.80771 8.82609	4.2167 - 6 4.2142 4.2117 4.2092 4.2068 4.2043 4.2018 4.1993 4.1969 4.1969	1.03648 + 0 -1.03607 1.03547 1.03548 1.03545 1.03564 1.03303 1.03242 1.03182
-5000 -4900 -4800 -4700 -4500 -4500 -4500 -4300 -4100	-4999 -4899 -4599 -4599 -4399 -4199 -4199 -4199	1135.48 1135.10 1134.72 1134.35 1133.97 1133.21 1133.21 1132.83 1132.46 1132.08	1.2343 - 5 1.2336 1.2330 1.2324 1.2317 1.2311 1.2305 1.2292 1.2292	1.02649 + 0 1.02597 1.02594 1.02492 1.02499 1.02386 1.02384 1.02281 1.02228	1.3977 - 4 1.4010 1.4042 1.4075 1.4107 1.4173 1.4173 1.4204 1.4239 1.4273	8.88961 - 1 8.91024 8.93093 8.95167 8.97248 8.99336 9.01429 9.03528 9.0528 9.07746	4.1919 - 6 4.1894 4.1875 4.1845 4.1829 4.1795 4.1770 4.1746 4.1721 4.1696	1.03060 + 0 1.02999 1.02938 1.02877 1.02816 1.02755 1.02694 1.02633 1.02572
-4000 -3900 -3600 -3700 -3600 -3500 -3400 -3200 -3100	~3200	1131.70 1131.32 1130.94 1130.56 1130.18 1129.80 1129.82 1129.04 1128.67 1128.67	1.2279 - 5 1.2273 1.2267 1.2260 1.2254 1.2248 1.2235 1.2235 1.2229	1.02123 + 0 1.02070 1.02017 1.01945 1.01912 1.01859 1.01856 1.01753 1.017701	1-4306 - 4 1-4339 1-4373 1-4406 1-4400 1-4474 1-4508 1-4508 1-4576 1-4610	9.09864 - 1 9.11989 9.14120 9.14257 9.18400 9.20550 9.22706 9.27038 9.27038 9.27014	4-1671 - 6 4-1646 4-1621 4-1597 4-1572 4-1547 4-1522 4-1497 4-1472 4-1472	1.02450 + 0 1.02389 1.02328 1.02267 1.02206 1.02145 1.02084 1.02023 1.01962 1.01961
-3000 -2900 -2800 -2700 -2500 -2500 -2400 -2300 -2100	-2900 -2800 -2700 -2600	1127.91 1127.53 1127.15 1126.77 1126.38 1126.00 1125.62 1125.24 1124.86 1124.48	1.2216 - 5 1.2209 1.2203 1.2197 1.2190 1.2184 1.2178 1.2171 1.2165 1.2159	1.01595 + 0 1.01542 1.01489 1.01486 1.01383 1.01383 1.01377 1.01224 1.01171	1.4644 4 1.4679 1.4713 1.4718 1.4783 1.48817 1.4852 1.4887 1.49923 1.4958	9.31394 - 1 9.33585 9.35780 9.37782 9.40190 9.42405 9.44625 9.46655 9.49090 9.51331	h.1123 - 6 h.1396 h.1373 h.1373 h.1328 h.1298 h.1273 h.1248 h.1224 h.1199	1.01839 + 0 1.01778 1.01777 1.01856 1.01595 7.01538 1.01472 1.01411 1.01350
-2000 -1900 -1800 -1700 -1600 -1500 -1500 -1300 -1100	-1700	124.10 1123.72 1123.34 1122.96 1122.57 1122.19 1121.61 1121.43 1121.05	1:2152 - 5 1:2146 1:2139 1:2133 1:2127 1:2120 1:2114 1:2107 1:2101 1:2095	1.01065 + 0 1.01012 1.00959 1.00953 1.00853 1.007799 1.00746 1.02693 1.00640 1.00587	1.4993 - 4 1.5029 1.5064 1.5100 1.5136 1.5172 1.5208 1.5244 1.5280 7.5316	9.53580 - 1 9.55835 9.58097 9.60365 9.62641 9.64923 9.67212 9.67212 9.71812 9.71812	4.1174 - 6 4.1149 4.1124 4.1079 4.1074 4.1049 4.1024 4.0999 4.0974	1.01228 + 0 1.01166 1.01105 1.01094 1.00982 1.00921 1.00860 1.00798 1.00737

TABLE VI. Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	ude	Sound speed		of viscosity	, i 		Thermal c	onductivity
Z, ft	H, ff	C _s ,	μ , lb ft $^{-1}$ sec $^{-1}$	$\frac{\mu}{\mu_0}$	η_{j} . ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k, BTUff ⁻¹ sec ⁻¹ (°R) ⁻¹	- <u>k-</u> -
-9000 -8900 -8500 -8700 -8500 -8500 -8500 -8300 -8200 -8100	-9004 -8904 -8904 -8704 -8503 -8403 -8303 -8203 -8103	1150.49 1150.12 1149.37 1149.37 1149.00 1148.62 1148.25 1147.88 1147.50	1.259% - 5 1.2582 1.2582 1.2575 1.2563 1.2557 1.2557 1.2550 1.2554 1.2538	1.04740 + 0 1.04686 1.04584 1.04584 1.04580 1.04480 1.04488 1.04376 1.04324	1.275% - % 1.276% - % 1.276% - % 1.2810 1.2810 1.2819 1.2928 1.2928 1.2927 1.2987	8.11134 - 1. 8.12971 8.14814 8:16662 8.18515 8.2037h 6.22238 8.24108 8.245082 6.27863	4.2907 - 6 4.2858 4.2858 4.2833 4.2809 4.2764 4.2759 4.2735 4.2710 4.2685	1,05489 + 0 1,05428 1,05348 1,05307 1,05247 1,05186 1,05126 1,05065 1,05004 1,04944
-8000 -7900 -7800 -7700 -7400 -7500 -7400 -7300 -7300 -7100	-8003 -7903 -7803 -7703 -7603 -7503 -7403 -7303 -7202 -7102	1146.76 1.146.38 1146.01 1145.63 1145.26 1144.88 1144.51 1144.13 1143.76	1.2532 ~ 5 1.2525 1.2519 1.2513 1.2500 1.2500 1.2494 1.2488 1.2481	1.04220 + 0 1.04163 1.04116 1.04064 1.04012 1.03959 1.03907 1.03855 1.03803 1.03751	1.30% - 4 1.30% 1.3106 1.3136 1.3136 1.3196 1.3226 1.3256 1.3286	8.29748 - 1 8.31639 8.33536 8.35348 8.37346 8.37259 8.41177 8.45107 8.45031 8.46966	4.2661 - 6 4.2636 4.2611 4.2587 4.2582 4.2537 4.2533 4.2488 4.2463 4.2463	1.04883 + 0 1.04823 1.04762 1.04702 1.04641 1.04580 1.04520 1.0459 1.04398
-7000 -6900 -6800 -4700 -6400 -6500 -6400 -6400 -6200 -6100	-7002 -6902 -6802 -6702 -6502 -6502 -6302 -6302 -6102	1143.01 1142.63 1142.26 1141.88 1141.51 1141.13 1140.76 1140.38 1140.00 1139.63	1.2469 - 5 1.2462 1.2456 2.2450 1.2451 1.2431 1.2431 1.2425 1.2418 1.2412	1,03648 + 0 1,03646 1,03594 1,03582 1,03489 1,033437 1,03385 1,03382 1,03280 1,03227	1.3347 - 4 1.3378 1.3409 1.3440 1.3570 1.3501 1.3532 1.3564 3.3564	8.48907 - 1 8.50854 8.52806 8.54764 8.56727 8.56497 8.60672 8.62653 8.64639 8.64632	*.2*1% - 6 *.2389 *.2365 *.2360 *.2315 *.2291 *.2266 *.2241 *.2216 *.2216	1.04277 + 0. 1.04216 1.04155 1.04095 1.04034 1.03973 1.03852 1.03791 1.03730
-6000 -5900 -5800 -5700 -5500 -5500 -5500 -5300 -5100	-4002 -5902 -5802 -5702 -5601 -5501 -5401 -5301 -5201	1139.25 1138.88 1138.50 1138.12 1137.75 1137.37 1136.99 1136.62 1136.24	1.2406 - 5 1.2400 1.2393 1.2387 1.2381 1.2374 1.2368 1.2362 1.2355 1.2349	1.03175 + 0 1.03123 1.03270 1.03270 1.03018 1.02965 1.02913 1.02860 1.02808 1.02755	1.3658 - 4 1.3669 1.3721 1.3752 1.3784 1.3816 1.3846 1.3880 1.3912 1.3944	8.68630 - 1 8.70634 8.72644 8.74660 8.74681 8.74709 8.60742 8.82782 5.88827 8.86879	4.2167 - 6 4.2182 4.2117 4.2093 4.2068 4.2043 4.2018 4.1994 4.1969 4.1944	1.03669 + 0 1.03608 1.03548 1.03487 1.03426 1.03365 1.03305 1.03203 1.03182
-5000 -4900 -4800 -4700 -4600 -4500 -4300 -4200 -4100	-5001 -4901 -4801 -4701 -4601 -4501 -4301 -4301 -4201	1135.48 1135.11 1134.73 1134.35 1133.97 1133.59 1133.22 1132.84 1132.46 1132.06	1-2343 5 1-2336 1-2330 1-2324 1-2317 1-2311 1-2305 1-2298 1-2296	1.02650 + 0 1.02597 1.02595 1.02492 1.02480 1.02387 1.02384 1.02282 1.02229	1.3977 - 4 1.4009 1.4074 1.4074 1.4177 1.4140 1.4173 1.4206 1.4239	8.88936 - 1 8.91070 8.93070 8.95145 8.97227 8.99315 9.01409 9.03510 9.03516 9.07729	h.1919 - 6 h.1870 h.1870 h.1870 h.1820 h.1795 h.1771 h.1746 h.1721 h.1696	1.03061 + 0 1.03000 1.02939 1.02878 1.02817 1.02756 1.02634 1.02573 1.02512
-4000 -3900 -3800 -3700 -3400 -3500 -3300 -3200 -3100	-4001 -3901 -3801 -3703 -3401 -3501 -3501 -3301 -3200 -3100	1131.70 1131.32 1130.94 1130.56 1130.19 1129.83 1129.05 1128.67 1128.29	1.2279 - 5 1.2273 1.2267 1.2260 1.2254 1.2254 1.2241 1.2241 1.2229 1.2222	1.02123 + 0 1.02071 1.02018 1.01945 1.01912 1.01859 1.01857 1.01754 1.01701	1.4306 - 4 1.4337 1.4373 1.4406 1.4440 1.4474 1.4508 1.4508 1.4576 1.4610	9.09848 - 1 9.11973 9.14105 9.16243 9.16387 9.20538 9.22695 9.24695 9.27028 9.27028	4.1671 - 6 4.1646 4.1622 4.1597 4.1572 4.1557 4.1557 4.1522 4.1547 4.1548	1.02451 + 0 1.02390 1.02329 1.02268 1.02206 1.02145 1.02084 1.02023 1.01962 1.01901
-3000 -2900 -2800 -2700 -2500 -2500 -2400 -2300 -2200 -2100	-3000 -2900 -2800 -2700 -2600 -2500 -2300 -2300 -2100	1127.91 1127.53 1127.15 1126.77 1126.39 1126.01 1125.62 1125.24 1124.86	1.2216 - 5 1.2210 1.2203 1.2197 1.2190 1.2194 1.2178 1.2171 1.2165 1.2159	1.01595 + 0 1.01542 1.01489 1.01436 1.01333 1.01330 1.01277 1.01224 1.01171	1.4644 - 4 1.4679 1.4713 1.4778 1.4783 1.48617 1.4852 1.4862 1.4923 1.4958	7.31387 - 1 9.33576 9.35772 9.35772 9.40183 9.40183 9.4620 9.46849 9.49084 9.51325	4.1423 - 6 4.1398 4.1373 4.1348 4.1328 4.1298 4.1273 4.1279 4.1224 4.1199	1.01840 + 0 1.01779 1.01717 1.01656 1.01595 1.01534 1.01473 1.01413 1.01550 1.01289
-2000 -1990 -1800 -1700 -1400 -1500 -1400 -1300 -1200 -1100	-2000 -1900 -1800 -1700 -1600 -1500 -1400 -1200 -1100	1124-10 1123-72 1123-34 1122-96 1122-57 1122-19 1121-61 1121-65 1120-66	1.2152 - 5 1.2146 1.2139 1.2133 1.2127 1.2120 1.2116 1.2107 1.2101 1.2095	1.01065 + 0 1.01012 1.00959 1.00906 1.00853 1.00799 1.00799 1.00293 1.002687	1.4993 - 4 1.5029 1.5064 1.5100 1.5136 1.5172 1.5208 1.5280 1.5280	9.53575 - 1 9.55831 9.58093 9.40362 9.42638 9.64921 9.47210 9.46507 9.74120	4.1174 - 6 4.1189 4.1124 4.1099 4.1074 4.1089 4.1089 4.0999 4.09974 4.0949	1.01228 + 0 1.01166 1.01105 1.01044 1.00982 1.00921 1.00860 1.00798 1.00737
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TABLE VI.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altitude	Sound speed.	Coefficient	of viscosity	Kinematic	viscosity	Thermal o	onductivity
H, ft Z, ft	C _{s.} ,	μ , ib ft sec sec s	$\frac{\mu}{\mu_0}$	η, ft² sec-'	$\frac{\eta}{\eta_0}$	k , BTU ff ⁻¹ sec ⁻¹ (°R) ⁻¹	- k - k _O
-1000 -1000 -900 -800 -700 -700 -500 -500 -500 -300 -300 -200 -100 -100	1119.90 1119.52 1119.13 1118.75 1118.37 1117.60 1117.22	1.2086 - 5 1.2082 1.2075 1.2069 1.2069 1.2056 1.2056 1.2053 1.2037	1.00533 + 0 1.00480 1.00427 1.00374 1.00320 1.00267 1.00214 1.00100	1.5353 - 4 1.5389 1.5463 1.5463 1.5536 1.5574 1.5511 1.5648	9.76439 - 1 9.78763 9.81094 9.83432 9.85777 9.88130 9.90489 9.92556 9.97611	4.0924 - 6 4.0899 4.0814 4.0824 4.0824 4.0799 4.0775 4.0750 4.0725 4.0700	1.0061% + 0 1.00593 1.00492 1.00430 1.00307 1.00307 1.00246 1.00123 1.00062
0 100 100 200 300 300 500 600 600 700 800 800 900 900	1116.07 1115.68 1115.30 1114.53 1114.14 1113.76 1113.38	1.2024 - 5 1.2018 1.2011 1.2005 1.1998 1.1992 1.1985 1.1979 1.1973 1.1966	1.0000 + 0 9.99466 - 1 9.99931 9.98397 9.97862 9.97327 9.96792 9.96236 9.95721 9.95185	1.5723 - 4 1.5761 1.5798 1.5836 1.5874 1.5913 1.5951 1.5989 1.6028	1.00000 # 0: 1.00239 + 0 1.00480 1.00721 1.00963 1.01205 1.01448 1.01692 1.01937 1.02182	4.0674 - 6 4.0649 4.0624 4.0599 4.0574 4.0549 4.0524 4.0474 4.0474	1.00000 + (9.99385 - (9.98170 - (9.98155 - (9.97539 - (9.96924 - (9.96308 - (9.96693 - (9.95677 - (9.94481
1000 1000 1100 1200 1200 1200 1300 1300 1400 1400 1500 1500 1600 1600 1700 1800 1800	1112.22 1111.83 1111.45 1111.06 1110.68 1110.29 1109.91 1109.52	1.1960 - 5 1.1953 1.1947 1.1940 1.1934 1.1927 1.1927 1.1915 1.1906 1.1902	9.94649 - 1 9.94113 7.93577 9.93040 9.92503 9.91967 9.91430 9.90892 7.90355 9.89818	1.6105 - 4 1.6184 1.6183 1.6222 1.6261 1.6380 1.6379 1.6419 1.6459	1.02429 + 0 1.02676 1.02923 1.03172 1.03421 1.03571 1.03922 1.04173 1.04426 1.04679	4.0424 - 6. 4.0374 1.0374 1.0349 4.0324 4.0299 4.0273 4.0249 4.0223 4.0198	9.93345 9.93229 9.92612 9.91906 9.91379 9.90146 9.89529 9.88912 9.8829%
2000 2000 2100 2100 2200 2200 2300 2300 2400 2400 2500 2500 2600 2600 2700 2700 2800 2800 2900 2900	1108.36 1107.97 1107.59 1107.20 1106.81	1.1895 - 5 1.1882 1.1876 1.1869 1.1863 1.1856 1.1856 1.1850 1.1843	9.89280 - 1 9.88742 9.88204 9.87666 9.87127 9.86589 9.86050 9.85311 9.84972 9.84432	1.6499 - 4 1.6539 1.6579 1.6619 1.6660 1.6700 1.6770 1.6782 1.6822	1.04933 + 0 1.05184 1.055483 1.05599 1.05956 1.06224 1.06473 1.06473 1.06492	4.0173 - 6 4.0148 4.0123 4.0098 4.0073 4.0048 4.0023 3.9997 3.9997	9.87677 - 9.87060 9.86442 9.85825 9.85207 9.84589 9.83971 9.83353 9.82735 9.82116
3000 3000 3100 3100 3200 3200 3300 3301 3400 3401 3500 3501 3600 3601 3700 3701 3800 3801	1104.49 1104.10 1103.71 1103.32 1102.93 1102.95 1102.16	1.1830 - 5 1.1824 1.1817 1.1811 1.1801 1.1798 1.1791 1.1785 1.1778	7.83893 - 1 9.83353 9.82813 9.82273 9.81733 9.81193 9.80652 9.80111 9.79570 9.79029	1.6905 - 4 1.6946 1.6987 1.7029 1.7071 1.7112 1.7154 1.7197 1.7239	1.07515 + 0 1.07778 1.08042 1.08306 1.08571 1.08837 1.09104 1.09371 1.09340	3.9922 - 6 3.9897 3.9846 3.9821 3.9796 3.9771 3.9776 3.9770 3.9720 3.9695	9.81498
\$000 \$001 \$100 \$101 \$200 \$201 \$500 \$301 \$500 \$501 \$600 \$501 \$700 \$701 \$800 \$801	1100.60 1100.21 1099.82 1099.43 1099.04 1098.65 1098.26	1.1765 - 5 1.1759 1.1752 1.1746 1.1739 1.1733 1.1726 1.1720 1.1713 1.1707	9.78488 - 1 9.77946 9.77405 9.76863 9.76321 9.75779 9.75236 9.74694 9.74694 9.73608	1.7324 - 4 1.7366 1.7409 1.7452 1.7495 1.7538 1.7581 1.7625 1.7668 1.7712	1-10179 + 0 1-10450 1-10722 1-10995 1-11268 1-11543 1-11818 1-12094 1-12371 1-12649	3.9670 - 6 3.9645 3.9620 3.9594 3.9559 3.9559 3.9519 3.9493 3.9468 3.9483	9.75306 - 9.74686 9.74066 9.73446 9.72826 9.72206 9.71585 9.70965 9.70344 9.69723
5000 5001 5100 5101 5200 5201 5300 5301 5400 5401 5500 5501 5600 5602 5700 5702 5800 5802 5800 5802	1096.70 1096.31 1095.92 1095.53 1095.14 1094.75 1094.35 1093.96	1	9.73065 - 1 9.72521 9.71978 9.71434 9.70890 9.70346 9.69802 9.69257 9.68713 9.68168	1.7756 - 4 1.7600 1.7688 1.7932 1.7932 1.7977 1.8022 1.8066 1.8111	1.12926 + 0 1.13207 1.13488 1.13769 1.14051 1.14334 1.14618 1.14903 1.15189	3.9418 - 6 3.9392 3.9367 3.9382 3.9317 3.9291 3.9266 3.9281 3.9216 3.9190	9.69102 9.68481 9.67239 9.66617 9.65996 9.65378 9.64753 9.64753 9.64131
6000 6002 6100 6102 6200 6202 6300 6302 6400 6402 6500 6502 6700 6702 6800 6802 6900 6802	1092.79 1092.39 1092.00 1091.67 1091.22 1090.82 1090.43	1.1635 - 5 1.1628 1.1622 1.1615 1.1609 1.1602 1.1595 1.1599 1.1590	9.67623 - 1 9.67078 9.66532 9.655987 9.65441 9.64895 9.64349 9.63803 9.63256 9.62710	1.8202 - 4 1.8247 1.8247 1.8336 1.8338 1.8430 1.8430 1.8522 1.8522 1.8569	1.15764 + 0 1.16052 1.16342 1.16632 1.16923 1.17216 1.17509 1.17803 1.18098 1.18394	3.9165 - 6 3.9140 3.9114 3.9089 3.9084 3.9038 3.9013 3.8988 3.8985 3.8937	9.62887 - 9.62264 9.61642 9.61019 9.60397 9.59774 9.59151 9.58528 9.57905 9.57282

TABLE XI.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Z, ft -1000 -900 -800 -700 -500 -300 -200 -100	-1000 -900 -800 -700 -600 -500 -400	Speed C _s , ft sec ⁻¹ 1120-28- 1119-90 1119-92 1119-11	μ, b ff ⁻¹ sec ⁻¹	$\frac{\mu}{\mu_0}$	η, ft² sec-	$\frac{\eta_{\cdot}}{\eta_{\Theta}}$	k,	<u>k</u> k ₀
-900 -800 -700 -600 -500 -400 -300 -200 -100	-900 -800 -700 -600 -500 -400	1119.90 1119.52	1.2088 = .5			. 70	BIUTT Sec (OR)	K _O
0.	-200 -100	1118.75 1118.37 1117.98 1117.60 1117.22	1.2075 1.2069 1.2069 1.2056 1.2056 1.2050 1.2043 1.2037	1w00533 • 0 1w00480 1w00427 1w00374 1w00320 1w00267 1w00160 1w00107 1w00107	1.5353 - 4 1.5326 1.5326 1.5403 1.5409 1.5534 1.5574 1.5611 1.5646 1.5685	9.76438 - 1 9.76762: 9.81093: 9.85777 9.88129 9.90489 9.92826 9.976111	#-0924 - 6 #-0899 #-0878 #-0884 #-0824 #-0799 #-0775 #-0755 #-0725	1.00614 + 0 1.00553 1.00492 1.00430 1.00369 1.00369 1.00246 1.00184 1.00123 1.00062
100 200 300 400 500 600 700 800	200 300 400 500 600 700 800	1116.45 1115.68 1115.30 1114.91 1114.53 1114.14 1113.76 1113.38 1112.99	1.2024 - 5 1.2018 1.2011 1.2005 1.1998 1.1992 1.1986 1.1979 1.1973 1.1966	1.00000 + 0 9.99466 - 1 9.98931 9.98397 9.97862 9.97327 9.965792 9.96256 9.95721 9.95185	1.5723 - 4 1.5761 1.5798 1.5836 1.5874 1.5913 1.5951 1.5989 1.6028 1.6028	1.00000 + 0 1.00239 + 0 1.00480 1.00721 1.00963 1.01205 T.01448 1.01692 1.01937 1.02182	\$.0674 - 6 \$.0649 \$.0624 \$.0599 \$.0519 \$.0549 \$.0899 \$.0878 \$.0849	1.00000 + 0' 9.99385 - 1 9.98770 9.98155 9.77540 9.96303 9.95693 9.95077 9.94461
1000 1100 1200 1300 1400 1500 1600 1700 1800 1900	1600	1112.61 1112.22 1111.83 1111.45 1111.06 1110.48 1110.29 1109.91 1109.52 1109.13	1.1940 - 5 1.1953 1.1947 1.1940 1.1934 1.1927 1.1921 1.1915 1.1908	9,94649 1 9,94113 9,93577 9,93547 9,92504 9,91967 9,91430 9,90893 9,90356 9,89819	1.6105 - 4 1.6144 1.6183 1.6222 1.6261 1.63300 1.6340 1.6379 1.6419	1.02429 + 0 1.02675 1.02923 1.03172 1.03421 1.03671 1.03922 1.04173 1.04679	1.0828 - 6 4.0399 4.0374 4.0329 4.0328 4.0229 4.0274 2.0289 4.0224	9.93845 - 1 9.93229 9.92613 9.91996 9.91380 9.90763: 9.90146 9.89530 9.889530 9.88913 9.88296
2000 2100 2200 2300 2400 2500 2600 2700 2800 2900	2100 2200 2300 2400 2500 2600 2700 2800	1108.75 1108.36 1107.97 1107.59 1107.20 1106.81 1106.43 1106.04 1105.65 1105.26	1.1895 - 5 1.1882 1.1862 1.1876 1.1869 1.1863 1.1856 1.1850 1.1843	9.89281 ~ 1 9.88743 9.88205 9.87667 9.87129 9.84590 9.86592 9.85513 9.84974 9.84435	1.6499 - 4 1.6539 1.6579 1.6619 1.6659 1.6700 1.6741 1.6781 1.6822	1.04932 + 0 1.05187 1.05442 1.05699 1.056213 1.06472 1.06731 1.06991	4.0148 4.0148 4.0123 4.0098 4.0073 4.0048 4.0023 3.9997 3.9997 3.9947	9.87678 - 1 9.87061 9.864% 9.85826 9.85208 9.84591 9.83573 9.83575 9.82737
3000 3100 3200 3300 3500 3500 3600 3700 3800 3900	3100 3200 3299 3399 3499 3599 3699	1104.88 1104.49 1104.10 1103.71 1103.33 1102.94 1102.55 1102.16 1101.77 1101.38	1.1830 - 5 1.1824 1.1817 1.1811 1.1804 1.1798 1.1791 1.1785 1.1775	9.83875 = 1 9.83856 9.82816 9.82276 9.81736 9.81736 9.801196 9.80615 9.80115 9.779574 9.79033	1.6905 - 4 1.6987 1.6987 1.7029 1.7070 1.7112 1.7154 1.7156 1.7238	1.0751% + 0 1.07777 1.080%0 1.0830% 1.08570 1.08835 1.09102 1.09370 1.09638 1.09907	3.9922 - 6 3.9897 3.9872 3.9821 3.9726 3.9776 3.9776 3.9746 3.9721 3.9746	9.81500 - 1 9.80882 9.80263 9.79645 9.79645 9.78407 9.77788 9.77169 9.76550 9.75930
4000 4100 4200 4300 4400 4500 4600 4700 4800 4900	1000 1000 1200 1300 1500 1500 1500 1700	1100.99 1100.60 1100.21 1099.83 1099.84 1099.05 1098.66 1098.27 1097.88 1097.49	1.1765 - 5 1.1759 1.1752 1.1754 1.1739 1.1735 1.1726 1.1720 1.1721	9.78492 - 1 9.77951 9.77409 9.76868 9.76326 9.75784 9.75242 9.74699 9.74679 9.74674	1.7323 - 4 1.7366 1.7409 1.7451 1.7494 1.7537 1.7581 1.7624 1.7668 1.7711	1.10177 + 0 1.10468 1.10720 1.10792 1.11266 1.11540 1.11815 1.12091 1.12368 1.12646	3.9670 - 6 3.9645 3.9620 3.9595 3.9569 3.9519 3.9519 3.9494 3.9494 3.9494	9.75311 - 1 9.74691 9.74071 9.73452 9.72832 9.72212 9.71592 9.71592 9.70351 9.70351 9.69730
5000 5100 5200 5300 5300 5500 5600 5700 5800 5900	5099 5199 5299 5399 5499 5598 5698 5798	1097.10 1096.71 1096.32 1095.92 1095.53 1095.14 1094.75 1094.36 1093.97 1093.58	1.1700 - 5 1.1694 1.1647 1.1648 1.1674 1.1668 1.1661 1.1655 1.1648	9.73071 - 1 9.72528 9.71953 9.71941 9.70898 9.70354 9.69810 9.69266 9.68722 9.68177	1.7755 - h 1.7799 1.7843 1.7887 1.7932 1.7976 1.8021 1.8066 1.8111	1.1292# + 0 1.1320# 1.1340# 1.13765 1.140#7 1.14330 1.1461# 1.14809 1.15185	3.9418 - 6 3.9393 3.9362 3.9317 3.9217 3.9266 3.9266 3.9216 3.9216	9.69110 - 1 9.68489 9.67868 9.67247 9.66626 9.66005 9.65384 9.64762 9.64762 9.64141 9.63519
6000 6100 6200 6300 6400 6500 6600 6700 6800 6900	6098 6198 6298 6398 6598 6598 6698 6798	1093.19 1092.79 1092.40 1092.01 1091.62 1091.22 1090.83 1090.44 1090.05 1089.65	1.1635 - 5 1.1628 1.1622 1.1615 1.1609 1.1602 1.1596 1.1582 1.1582	9.67632 - 1 9.67087 9.66582 9.65997 9.65952 9.68906 9.64360 9.64360 9.63268 9.62722	1.8201 - 4 1.8246 1.8292 1.8337 1.8383 1.8429 1.8475 1.8521 1.8568	1.15759 + 0 1.16047 1.16335 1.16627 1.16918 1.17210 1.17503 1.17503 1.17797 1.18091	3.9165 - 6 3.9140 3.9115 3.9089 3.9064 3.9039 3.9014 3.8988 3.8963 3.8938	9.62897 - 1 9.62275 9.61653 9.61031 9.60409 9.59787 9.59164 9.58542 9.57919 9.57296

TABLE XI.—Continued

GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altıtu	ide	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermore	conductivity
н, 🕆	Z, ft	C _s ,	μ , lb ft sec $^{-1}$	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k., BTUπi [*] sec ⁻¹ (ΦR) ⁽¹	± 1/ ₀ ·
7000 7100 7200 7300 7400 7500 7600 7700 7800 7900	7002 7102 7202 7303 7403 7503 7603 7703 7803 7903	1089-25 1088-86 1088-46 1088-07 1087-68 1087-28 1086-89 1086-49 1086-10 1085-71	1.1569 - 5 1.1563 1.1556 1.1549 1.1543 1.1536 1.1536 1.1523 1.1516 1.1510	9.62163 - 1 9.61616 9.61068 9.60521 9.59973 9.59426 9.58878 9.58329 9.57233	1.8662 - 4 1.8709 1.8756 1.8803 1.8850 1.8898 1.8945 1.8945 1.8993 1.9041	1.18491 + 0 1.18989 1.19288 1.19587 1.19888 1.20190 1.20492 1.20496 1.21101 1.21406	3.0712 - 6 3.0804 5.0804 3.0810 3.0810 3.0705 3.0734 3.0734 3.0730 3.0700 3.0803	V. \$46.07 V. \$46.07 V. \$47.00 12 V. \$47.00 V. \$47.00 V. \$20.00 V. \$2
8000 8100 8200 8300 8500 8500 8500 8700 8700	8103 8203 8303 8403 8503 8604 8704 8804	1085.31 1084.92 1084.52 1084.13 1063.73 1063.73 1062.94 1062.5 1082.15	1.1503 - 5 1.1490 1.1490 1.1483 1.1477 1.1470 1.1464 1.1457 1.1450 1.1450	9.56684 - 1 9.56135 9.55586 9.55036 9.55487 9.53487 9.53387 9.52337 9.52287 9.51737	1.9137 - 4 1.9185 1.9234 1.9233 1.9331 1.9380 1.9429 1.9479 1.9528 1.9578	1.21713 + 0 1.22020 1.22329 1.22538 1.22549 1.23561 1.23573 1.23687 1.24517	3.8638 - 6 3.8632 3.9407 3.8582 3.8556 3.8531 3.8505 3.8480 3.8454 3.8429	9.3019 9.49794 9.49344 9.47919 9.42594 9.46649 9.46641 9.49418
9000 9100 9200 9300 9400 9500 9600 9700 9800	9004 9104 9205 9304 9404 9504 9705 9805 9805	1081-36 1080-96 1080-56 1080-17 1079-77 1079-37 1078-97 1078-58 1078-18 1077-78	1.1437 - 5 1.1431 1.1424 1.1417 1.1417 1.1404 1.1397 1.1384 1.1377	9.51196 - 1 9.50635 9.50635 9.49533 9.48982 9.48830 9.47878 9.47326 9.47326 9.46222	1.9628 - 4 1.9678 1.9728 1.9778 1.9828 1.9879 1.9981 2.0032 2.0083	1.24833 + 0 1.25151 1.25570 1.25789 1.26110 1.26432 1.26755 1.27078 1.27778	3.8403 - 6 3.8376 3.8353 3.8327 3.8302 3.8276 3.8253 3.8225 3.8225 3.8220 3.8174	7.42540 7.42540 7.42540 7.4260 7.41602 7.41607 7.41783 7.31782
10000 10100 10200 10300 10400 10500 10600 10700 10800 10900	10005 10105 10205 10305 10405 10505 10605 10705 10806 10906	1077.39 1076.99 1076.59 1076.19 1075.79 1075.39 1075.00 1074.60 1074.20 1074.20	1.1371 - 5 1.1364 1.1358 1.1351 1.1344 7.1338 1.1331 1.1324 1.1318	9.45669 - 1 9.45117 9.45564 9.44561 9.43457 9.42904 9.42350 9.41796 9.41242 9.410688	2.0134 - 4 2.0186 2.0288 2.0290 2.0392 2.0394 2.0446 2.0499 2.05552 2.0605	1.28056 + 0 1.28384 1.28713 1.29044 1.29375 1.29707 1.30041 1.30375 1.30711	3.8149 ~ 6 3.8123 3.8078 3.8072 3.8047 3.8021 3.7996 3.7970 3.7919	9.37902 - 9.37275 9.3448 9.34020 9.3303 9.34745 9.34745 9.3510 4.3282 9.3254
11000 11100 11200 11200 11300 11400 11500 11600 11700 11800	11006 11106 11206 11306 11406 11506 11606 11707 11807	1073.40 1073.00 1072.40 1072.20 1071.80 1071.40 1070.60 1070.60 1070.20	1.1304 - 5 1.1298 1.1291 1.1284 1.1278 1.1271 1.1264 1.1258 1.1251 1.1251	9.40133 - 1 9.39579 9.39024 9.38469 9.37914 9.37358 9.36803 9.36247 9.35691 9.355135	2.0658 - 4 2.0711 2.0765 2.0818 2.0872 2.0926 2.0980 2.1035 2.1089 2.1144	1.31386 + 0 1.31725 1.32065 1.32786 1.33782 1.33782 1.33782 1.34129 1.34477	3.7893 6 3.7868 3.7842 3.7817 3.7791 3.7796 3.7740 3.7714 3.7689	7.31425 7.30997 7.3034% 9.20740 9.20111 7.20483 9.27854 9.27225 9.22946
12000 12100 12200 12300 12400 12500 12600 12700 12800 12900	12007 12107 12207 12307 12407 12507 12608 12708 12808 12908	1069-40 1069-00 1068-60 1068-20 1067-80 1067-40 1066-99 1066-59 1066-19 3065-79	3-1237 - 5 1-1231 1-1225 1-1227 1-12217 1-1204 1-1197 1-1191 1-1164 1-1177	9.34578 - 1 9.34022 9.33465 9.32908 9.32351 9.51793 9.31236 9.30678 9.30120 9.29562	2-1199 - 4 2-1254 2-1309 2-1365 2-1420 2-1476 2-1532 2-1588 2-1645 2-1701	1.34826 + 0 1.35176 1.35528 1.35580 1.36234 1.36589 1.36945 1.37303 1.37661 1.38021	3.7638 - 6 3.7612 3.7561 3.7561 3.7551 3.7510 3.7404 3.7458 3.7458 3.7458	9.25337 9.24707 9.24077 9.23448 9.22188 9.2188 9.2097 9.2097 9.1966
13000 13100 13200 13300 13400 13500 13700 13600 13700 13800	13108 13208 13308	1065.39 1064.98 1064.58 1064.18 1063.78 1063.37 1063.37 1062.97 1062.57 1062.16 1061.76	1.1170 - 5 1.1164 1.1157 1.1150 1.1144 1.1137 1.1130 1.1123 1.1117	9.29004 - 1 9.28445 9.27886 9.27327 9.26769 9.26209 9.25649 9.25090 9.24530	2.1758 - 4 2.1815 2.1872 2.1929 2.1987 2.204h 2.2102 2.2160 2.2219 2.2277	1.38382 + 0 1.38745 1.39107 1.3947.1 1.39837 1.40572 1.40572 1.41684	3.7381 - 6 3.7356 3.7330 3.7304 3.7279 3.7253 3.7227 3.7227 3.7202 3.7176 3.7150	7.190% 9.18405 9.17774 9.17143 9.16512 9.1681 9.15249 9.14618 9.13354
14000 14100 14200 14300 14400 14500 14700 14800 14900	14009 14110 14210 14310 14410 14510 14510 14710 14811 14911	1061-36 1060-95 1060-55 1060-14 1059-74 1059-34 1058-93 1058-53 1058-12 1057-72	1.1103 - 5 1.1096 1.1090 1.1083 1.1076 1.1069 1.1063 1.1056 1.1049	9.23409 - 1 9.22849 9.22288 9.21727 9.21166 9.20045 9.20043 9.19482 9.18920 9.18357	2.2336 - 4 2.2395 2.2454 2.2513 2.2572 2.2632 2.2692 2.2752 2.2812 2.2812	1.42057 + 0 1.42432 1.42807 1.43184 1.43562 1.43942 1.44323 1.44704 1.45088 1.45472	3.7125 - 6 5.7099 3.7073 3.7047 3.7022 3.6996 3.6970 3.6994 3.6919	9.12723 - 9.12091 9.11458 9.10194 9.09561 9.08929 9.08296 9.07643 9.07030

TABLE VI.—Confinued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Alti	tude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal o	conductivity
Ż, ft	H, ft	C _s , ft sec ⁻¹	μ , lb ft sec sec μ	$\frac{\mu}{\mu_0}$	η, ft² sec⁻¹	$\frac{\eta}{\eta_0}$	k, BTUft ^{-l} sec ^{-l} (ºR) ^{-l}	k k _O
7000 7100 7200 7300 7400 7500 7600 7700 7800 7900	6998 7098 7198 7199 7297 7397 7497 7597 7697 7797	1089-26 1088-87 1088-57 1088-08 1087-39 1087-29 1086-90 1086-51 1086-11 1085-72	1.1569 - 5 1.1563 1.1556 1.1559 1.1559 1.1536 1.1530 1.1523 1.1517 1.1510	9-62176 - 1 9-61629 9-61682 9-60535 9-59988 9-59440 9-58893 9-58345 9-57249	1.8661 - 4: 1.8708: 1.8754 1.8852 1.8896 1.8896 1.8944 1.8991	1-18684 + 0 1-18982 1-19880 1-19880 1-20182 1-20484 1-20787 1-21092	3.8912 - 6 3.8887 3.8862 3.8836 3.8811 3.8785 3.8760 3.8735 3.8709 3.8709	9.54473 - 1 9.54050 9.55427 9.54804 9.54180 9.53557 9.52933 9.52933 9.52310 9.51484 9.51062
8100 8200 8300 8400 8500 8600 8700 8800	7997 8097 8197 8297 8397 8597 8596 8696 8796	1085.32 1084.93 1084.53 1084.53 1084.14 1083.74 1083.35 1082.95 1082.16 1081.77	1.1503 - 5 1.1497 1.1497 1.1498 1.1477 1.1470 1.1457 1.1457 1.1457	9.56701 - 1 9.56152 9.55603 9.55055 9.54506 9.53956 9.53407 9.52857 9.52808 9.51758	1.9136 - 4 1.9184 1.9232 1.9281 1.9330 1.9379 1.9477 1.99526 1.9576	1.21703 + 0 1.22011 1.22319 1.22628 1.22938 1.23550 1.23562 1.236275 1.24189 1.24505	3.8659 - 6 3.8633 3.8608 3.8582 3.8557 3.8532 3.8506 3.8481 3.8455 3.8430	9.50438 - 1 9.49814 9.49189 9.48565 9.47940 9.47316 9.46691 9.46696 9.45441 9.44816
9000 9100 9200 9300 9400 9500 9600 9600 9900	8996 9096 9196 9296 9396 9496 9596 9695 9795	1081.37 1080.97 1080.58 1040.18 1079.79 1079.39 1078.99 1078.60 1078.20	1-1437 - 5 1-1424 1-1424 1-1418 1-1411 1-1404 1-1398 1-1391 1-1384 1-1376	9.51207 - 1 9.50657 9.50107 9.49556 9.49005 9.48954 9.47903 9.47351 9.46800 9.46248	1.9626 - 9. 1.9726 1.9726 1.9726 1.9826 1.9827 1.9927 1.9927 2.0029 2.0029	1.25821 + 0 1.25138 1.25437 1.25776 1.26096 1.26418 1.26740 1.27764 1.27388 1.27714	3.8404 - 6 3.8379 3.8354 3.8328 3.8303 3.8277 3.8252 3.8226 3.8201 3.8175	9.43565 9.42565 9.42314 9.41689 9.41689 9.4063 9.4063 9.4063 9.4063 9.4063 9.4063 9.4063
10000 10100 10200 10300 10400 10500 10600 10700 10800	9995 10095 10195 10295 10395 10495 10595 10695 10794 10894	1077.40 1077.01 1076.61 1076.21 1075.81 1075.42 1075.02 1074.62 1074.22	1.1371 - 5 1.1368 1.1358 1.1251 1.1345 1.1338 1.1331 1.1318 1.1311	9-45696 = 1 9-45184 9-44591 9-44591 9-44039 9-42933 9-42933 9-42380 9-41827 9-41273 9-40719	2-0132 - 4 2-0183 2-0235 2-0287 2-0399 2-0391 2-0496 2-0599 2-0602	1.28041 + 0 1.2836B 1.28697 1.29027 1.29027 1.2935B 1.29690 1.30023 1.30357 1.30692 1.31029	3.8150 - 6 3.8124 3.8099 3.8073 3.8073 3.8022 3.7997 3.7971 3.79746 3.7920	9.37932 - 1 9.37306 9.36079 9.36052 9.35425 9.34178 9.34171 9.32917 9.32289
11000 11100 11200 11300 11500 11500 11600 11700 11800	10994 11094 11194 11294 11394 11494 11594 11693 11793 11893	1073.42 1073.02 1072.65 1072.23 1071.83 1071.43 1071.03 1070.63	1.1305 - 5. 1.1298 1.1291 1.1285 1.1271 1.1265 1.1258 1.1251 1.1245	9-80166.m. 1 9-39612 9-39057 9-38503 9-37948 9-37394 9-36283 9-35728 9-35172	2.0655 4. 2.0708 2.0708 2.0815 2.0869 2.0923 2.0977 2.1031 2.1086 2.1140	1.31366 + 0 1.31705 1.32044 1.32385 1.32727 1.33070 1.33514 1.33759 1.34106 1.34453	3.7895 - 6 3.7884 3.7818 3.7793 3.7767 3.7742 3.7716 3.7655	9.31662 - 1 9.31034 9.30406 9.29779 9.29151 9.28522 9.27894 9.27266 9.26637 9.26009
12000 12100 12200 12300 12400 12500 12600 12700 12800 12900	11993 12093 12193 12293 12393 12493 12592 12692 12792 12892	1069.43 1069.03 1068.63 1068.23 1067.83 1067.43 1067.02 1066.62 1066.22	1.1238 - 5 1.1231 1.1225 1.1218 1.1211 1.1204 1.1198 1.1191 1.1184 1.1178	9.34617 - 1 9.34061 9.33505 9.32948 9.32392 9.31835 9.31278 9.30721 9.30721 9.30164 9.29606	2.1195 - 4 2.1250 2.1361 2.1361 2.1416 2.1472 2.1528 2.1528 2.1540 2.1697	1.34802 + 0 1.35152 1.35503 1.35655 1.36208 1.36562 1.36918 1.37275 1.377633 1.37992	3.7639 - 6 3.7614 3.7588 3.7563 3.7537 3.7511 3.7486 3.7486 3.7435 3.7409	9.25380 - 1 9.24751 9.24122 9.23493 9.22864 9.22235 9.21605 9.20976 9.20346 9.19717
13000 13100 13200 13200 13400 13500 13600 13700 13800 13900	12992 13092 13192 13292 13391 13491 13591 13691 13791 13891	1065.42 1065.02 1064.62 1064.21 1063.81 1063.41 1063.01 1062.60 1062.20 1061.80	1-1171 - 5 1-1168 1-1158 1-1151 1-1144 1-1137 1-1131 1-1124 1-1117 1-1111	9.29049 - 1 9.28491 9.27933 9.27933 9.27375 9.26816 9.26258 9.25549 9.25140 9.24581 9.24021	2.1753 - 4 2.1810 2.1867 2.1924 2.1922 2.2039 2.2097 2.2155 2.2213 2.2272	1.38352 + 0 1.38714 1.39077 1.39841 7.39806 1.40172 1.40540 1.40908 1.41278 1.41650	3.7383 - 6 3.7358 3.7358 3.7306 3.7281 2.7255 3.7230 3.7204 3.7178 3.7153	9.19087 - 1 9.18457 9.17627 9.17627 9.15695 9.15936 9.15305 9.14675 9.14044 9.13413
14000 14100 14200 14300 14500 14500 14600 14700 14800 14900	13991 14090 14190 14290 14390 14590 14590 14690 14790 14889	1061.39 1060.99 1060.59 1060.18 1059.78 1059.38 1058.97 1058.57 1058.16	1.1104 - 5 1.1097 1.1090 1.1084 1.1077 1.7070 1.1063 1.1057 1.1050 1.1043	9.23462 - 1 9.22902 9.22342 9.21782 9.21782 9.20661 9.20101 9.19540 9.18979 9.18417	2.2330 - 4 2.2389 2.2389 2.2507 2.2566 2.2686 2.2786 2.2806 2.2866	1.42022 + 0 1.42396 1.42771 1.437147 1.43525 1.43504 1.44665 1.45047 1.45431	3.7127 - 6 3.7101 3.7076 3.7050 3.7050 3.7024 3.6999 3.6973 3.6947 3.6921 3.6896	9.12782 - 1 9.12151 9.11519 9.10888 9.10257 9.09625 9.08993 9.08361 9.07730 9.07096
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TABLE VI.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

		Sound	,	THAL ALM				
Altı	tudę	speed	Coefficient	of viscosity	Kinématic	viscosity	Thermal o	conductivity
H, ft	Z, ft	C _s , ft sec"	μ , lb ff sec sec $^{-1}$	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^{-1}$	$\frac{\overline{\eta}}{\eta_0}$	k, BTÚ fi ⁻¹ sec ⁻¹ (PR) ⁻¹	k ko
15000 15100 15200 15300 15400 15500 15600 15700 15800 15900	15011 15111 15211 15211 15311 15411 15512 15612 15712 15812 15912	1057-31 1056-91 1056-50 1056-10 1055-69 1055-28 1054-88 1054-47 1054-06 1053-66	1.1036 - 5 1.1029 1.1022 1.1015 1.1009 1.1002 1.0998 1.0988 1.0981	9.17795 - 1 9.17233 9.16670 9.16107 9.15544 9.14981 9.14417 9.13853 9.13290 9.12725	2.2933 - 4 2.2994 2.3055 2.3117 2.3178 2.3240 2.3302 2.3364 2.3426 2.3489	1-45858 + 0 1-46245 1-4634 1-47915 1-47807 1-48201 1-48596 1-48390	3.6867 - 6 3.6841 3.6816 3.6790 3.6764 3.6738 3.6713 3.6687 3.6651	9.06397 - 1 9.05764 9.05131 9.04497 9.03863 9.03230 9.02596 9.01962 9.01962 9.01969
16000 16100 16200 16300 16400 16500 16700 16800 16900	16012 16112 16213 16313 16413 16513 16613 16713 16814 16914	1053.25 1052.84 1052.44 1052.03 1051.62 1051.21 1050.81 1050.40 1049.99 1049.58	1.0968 - 5 1.0961 1.0954 1.0948 1.0948 1.0927 1.0920 1.0914 1.0907	9.12161 - 1 9.11597 9.11032 9.10367 9.09902 9.09337 9.08771 9.08205 9.07639 9.07073	2.3551 - 4 2.3678 2.3678 2.3741 2.3805 2.3808 2.3932 2.3997 2.4061 2.4126	1.49789 + 0 1.50190 1.50592 1.50995 1.51399 1.51805 1.52213 1.52621 1.53032	3.6609 - 6. 3.6558 3.6558 3.6552 3.6506 3.6480 3.6455 3.6429 3.6403 3.6377	9.00059 - 1 8.99425 8.98170 8.98150 8.97521 8.96886 8.96251 8.95616 8.94980 8.94345
17000 17100 17200 17300 17400 17500 17600 17700 17800 17900	17014 17114 17214 17314 17315 17415 17515 17615 17715 17815 17915	1049-17 1048-77 1048-36 1047-95 1047-54 1047-13 1046-72 1046-31 1045-90 1045-49	1.0900 - 5 1.0886 1.0879 1.0873 1.0866 1.0859 1.0852 1.0852 1.0855	9.00507 - 1 9.05940 9.05374 9.04807 9.04807 9.03872 9.03105 9.02537 9.01969 9.01401	2.4191 - 4 2.4254 2.4321 2.4387 2.4453 2.4519 2.4585 2.4552 2.45788 2.47785	1.53856 + 0 1.54270 1.54686 1.55103 1.55522 1.555942 1.56364 1.56787 1.57637	3.6351 - 6 3.6325 3.6299 3.6274 3.6228 3.6222 3.6196 3.6170 3.6118	8.93709 - 1 8.93074 8.922438 8.91802 8.91802 8.90530 8.89894 8.89257 8.88621 8.87984
18000 18100 18200 18300 18400 18500 18600 18700 18800	18016 1816 18216 18316 18416 18516 18617 18617 18617	1045.08 1044.67 1044.26 1043.85 1043.44 1043.03 1042.62 1042.21 1041.80 1041.39	1.0832 - 5 1.0825 1.0818 1.0811 1.0804 1.0797 1.0791 1.0784 1.0777	9.00832 - 1 9.00264 8.99695 8.99126 8.98557 8.97787 8.97418 8.96848 8.96848	2.4853 - 4 2.4920 2.4988 2.5056 2.5124 2.5192 2.5261 2.5329 2.53399 2.5368	1.58064 + 0 1.58493 1.58924 1.59355 1.59789 1.60223 1.60660 1.61098 1.61537	3.6092 - 6. 3.60041 3.6015 3.5989 3.5963 3.5937 3.5911 3.5885 3.5885	8.87347 - 1 8.86710 8.86073 6.85436 8.8479 9.84162 8.83524 8.82586 8.82249 8.81611
19000 19100 19200 19300 19400 19500 19600 19700 19800 19900	19017 19118 19218 19318 19418 19518 19618 19719 19819	1040.97 1040.56 1040.15 1039.74 1039.33 1038.91 1038.50 1038.09 1037.68 1037.26	1.0763 - 5 1.0755 1.0756 1.0743 1.0726 1.0729 1.0722 1.0735 1.0736	8.95137 - 1 8.94567 8.93996 8.93425 8.92854 8.92282 8.91711 8.91139 8.90567 8.89994	2.5537 - 4 2.5607 2.5677 2.577.6 2.5818 2.5889 2.5960 2.6031 2.6103 2.6174	1.62420 + 0 1.62864 1.63310 1.63757 1.64205 1.64655 1.65507 1.65560 1.66015	3.5833 - 6 3.5807 3.5781 3.5755 3.5729 3.5703 3.5677 3.5651 3.5625 3.5599	8.80973 - 1 8.80335 8.79696 8.79058 8.78420 8.77781 8.777142 8.76503 8.75503 8.75525
20000 20100 20200 20300 20400 20500 20600 20700 20800 20900	20019 20119 20120 20320 20420 20520 20620 20721 20821 20921	1036-85 1036-44 1036-02 1035-61 1035-20 1034-78 1034-37 1033-95 1033-54	1.0694 - 5 1.0688 1.0681 1.06674 1.0667 1.0653 1.0646 1.0639	8.89422 - 1 8.88849 8.88276 8.87703 6.87730 8.85556 8.85598 8.85988 8.84834 8.84260	2.62%6 - \$ 2.6391 2.6891 2.6%6% 2.6537 2.6610 2.668% 2.6758 2.6832 2.6906	1.66930 + 0 1.67390 1.67351 1.68314 1.68778 1.69724 1.69712 1.70182 1.70183 1.71126	3.5573 - 6 3.5547 3.5521 3.5545 3.5445 3.5443 3.5417 3.5361 3.5365 3.5339	8.74586 - 1 8.73947 8.73307 8.72368 8.72068 8.71388 8.71388 8.70148 8.70148 8.60468
21000 21100 21200 21300 21400 21500 21600 21700 21800 21900	21021 21121 21222 21322 21422 21522 21622 21723 21823 21923	1032-71 1032-29 1031-88 1031-46 1031-05 1030-63 1030-22 1029-80 1029-38 1028-97	1.0626 - 5 1.0619 1.0612 1.0605 1.0598 1.0591 1.0584 1.0577 1.0570	8.83685 - 3: 6.83111 8.82536 8.81960 6.81385 6.80809 8.80233 8.79657 8.79081	2.6981 - 4 2.7056 2.7131 2.7206 2.7282 2.7358 2.743k 2.7510 2.7587 2.7664	1.71600 + 0 1.72076 1.72554 1.73033 1.73515 1.73597 1.74482 1.74968 1.75456 1.75946	3.5313 - 6 3.5287 3.5267 3.5225 3.5209 3.5183 3.5157 3.5131 3.5104 3.5078	8.68167 - 1 8.675%7 8.66906 8.66265 8.6552% 8.65528 8.6%382 8.6%3701 8.63701 8.63709 8.62%18
22000 22100 22200 22300 22400 22500 22500 22700 22800 22900	22023 22123 22224 22324 22424 22424 22524 22625 22725 22825 22925	1028.55 1028.13 1027.72 1027.30 1026.88 1026.47 1026.05 1025.63 1025.21 1024.79	1.0556 - 5 1.0549 1.0549 1.0535 1.0529 1.0522 1.0515 1.0508	8.77928 - 1. 8.77351 8.76774 8.76179 8.75619 8.75641 8.774463 8.73485 8.73307	2.7741 - 4 2.7819 2.7897 2.7975 2.8053 2.8132 2.8211 2.8290 2.8370 2.8349	1.76438 + 0 1.76931 1.77426 1.77923 1.78421 1.78922 1.79424 1.79928 1.80433	3.5052 - 6 3.5026 3.5000 3.497k 3.4948 3.4922 3.4869 3.4869 3.4869 3.4869	8.61776 - 1 8.61134 8.60492 8.59850 8.59208 8.59266 8.57923 8.577281 8.56638 8.55995
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TABLE VI.—Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	ude	Sound speed	T	of viscosity			Thermal c	onductivity
Z, ft	H, ft	C _s , ft sec ⁻¹	μ , lb ft $^{-1}$ sec $^{-1}$	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k, BTU ft ⁻¹ sec ⁻¹ (°R) ⁻¹	<u>k</u> k ₀
15000 15100 15200 15300 15400 15500 15600 15700 15800 15900	14989 15089 15189 15289 15389 15488 15588 15688	1057-36 1056-95 1056-55 1056-14 1055-74 1055-33 1054-92 1054-52 1054-11	1.1036 - 5 1.1030 1.1023 1.1016 1.1009 1.1003 1.0999 1.0989 1.0982 1.0976	9-17856 - 1 9-17294 9-16732 9-16170 9-15608 9-15646 9-1483 9-13920 9-13357 9-12794	2.2927 - 4 2.2988 2.3089 2.3110 2.3171 2.3233 2.3294 2.3356 2.3419 2.3481	1.45817 + 0 1.46293 1.46591 1.46980 1.47370 1.47762 1.48155 1.48549 1.48945 1.49342	3.6870 - 6 3.6844 3.6819 3.6793 3.6777 3.6741 3.6716 3.6690 3.6664 3.6633	9.06465 - 1. 9.05833 9.05201 9.04568 9.03935 9.03303 9.02470 9.02037 9.01404 9.00771
16000 16100 16200 16300 16400 16500 16600 16700 16800	15988 16088 16187 16287 16387 16487 16587 16687 16786 16886	1053-30 1052-89 1052-49 1052-08 1051-68 1051-27 1050-86 1050-45 1050-05 1049-64	1.0969 - 5 1.0965 1.0955 1.0948 1.0942 1.0935 1.0928 1.0921 1.0914	9.12230 - 1 9.11667 9.11103 9.10539 9.09975 9.09840 9.08846 9.08281 9.07716 5.07151	2.3544 - 4 2.36070 2.3670 2.3733 2.3736 2.3860 2.3928 2.3928 2.4053 2.4117	1249740 + 0 1.50140 1.50541 1.50943 1.51347 1.51752 1.52159 1.52567 1.52567 1.53387	3.0613 - 6 3.0561 3.6561 3.6535 3.0510 3.0488 3.0458 3.0432 3.0432 3.6406 3.6361	9.00137 - 1 8.99504 8.98570 8.98237 6.97603 8.96969 8.96335 E.95701 8.95066 8.94432
17000 17100 17200 17300 17400 17500 17600 17700 17800 17900	16986 17086 17186 17286 17385 17485 17585 17685 17785	1049.23 1048.82 1048.01 1047.60 1047.19 1046.78 1046.37 1045.96 1045.56	1.0901 ~ 5 1.0898 1.0887 1.0880 1.0867 1.0867 1.0863 1.0863 1.0840	9.06585 - 1. 9.06020 9.05454 9.04888 9.04322 9.03755 9.03189 9.02622 9.02055 9.01488	2.4182 - 4 2.4247 2.4312 2.4378 2.4509 2.4509 2.4575 2.4575 2.4778 2.4778	1.53799 + 0 1.58212 1.58627 1.55044 1.55861 1.55880 1.56301 1.56723 1.57147	3.6355 - 6 3.6329 3.6303 3.6277 3.6251 3.6226 3.6200 3.6174 3.6148 3.6122	8.93797 ~ 1 8.93163 8.92528 8.91893 8.91258 8.90623 8.89988 8.89353 8.88717 6.88082
18000 18190 18200 18300 18400 18500 18600 18700 18800	17984 18084 18184 18284 18384 18583 18683 18683	1045.15 1044.74 1044.33 1643.92 1043.51 1043.51 1042.69 1042.28 1041.87 1041.46	1.0833 - 5 1.0826 1.0819 1.0819 1.0805 1.0799 1.0792 1.0785 1.0776	9.00921 - 1 9.00353 8.99785 8.99217 8.98649 8.98681 8.97512 8.96944 8.96375 8.95805	2.4842 - 4 2.4907 2.4977 2.5045 2.5113 2.5181 2.5249 2.5318 2.5387 2.5456	1.57998 + 0 1.58426 1.58855 1.59286 1.59718 1.60152 1.60587 1.61024 1.61462 1.61702	3.6096 - 6 3.6071 3.6045 3.5093 3.5997 3.5987 3.5915 3.5889 3.5889	8.87446 - 1 8.86810 8.86174 8.85538 8.24902 8.84266 8.83630 8.8293 8.82357
19000 19100 19200 19300 19400 19500 19600 19700 19800 19900	18983 19083 19182 19282 19382 19482 19582 19681 19781	1041.05 1040.63 1040.22 1039.81 1039.40 1038.99 1038.58 1038.17 1037.75	1.0764 - 5 1.0758 1.0751 1.0751 1.0744 1.0737 1.0730 1.0723 1.0716 1.0710	8.95236 - 1 8.94657 8.94657 8.93527 8.92557 8.92386 8.91816 8.91245 8.91245 8.90674	2.5525 - 4 2.5595 2.5565 2.5735 2.5805 2.5876 2.5947 2.6018 2.60089 2.6161	1.62344 + 0 1.62786 1.63231 1.63677 1.64124 1.64573 1.65024 1.65476 1.65476	3.5838 - 6 3.5812 3.5786 3.5760 3.5734 3.5708 3.5682 3.5656 3.5650 3.5650	8.81083 - 1. 8.80446 8.79809 8.79172 8.78535 8.77897 8.77260 8.76622 8.76622 8.75347
20000 20100 20200 20300 20400 20500 20500 20700 20800 20900	19981 20081 20180 20280 20380 20480 20580 20579 20779 20879	1036.93 1036.52 1036.10 1035.69 1035.28 1034.86 1034.85 1034.04 1033.62 1033.21	1.0696 - 5 1.0689 1.0682 1.0682 1.0668 1.0661 1.0655 1.0648 1.0641 1.0634	8.89532 - 1 8.8960 8.88388 8.87816 8.87214 8.86672 8.86672 8.86099 8.85526 8.84953 8.84380	2.6233 - 4 2.6305 2.6377 2.6450 2.6523 2.6596 2.6649 2.6743 2.6896	1.668%2 + 0 1.67300 1.67761 1.68222 1.68686 1.69150 1.69617 1.70085 1.70085 1.71026	3.5578 - 6 3.5552 3.5556 3.5500 3.5474 3.5489 3.5423 3.5397 3.5371 3.5345	8.74709 - 1 8.74071 8.73432 8.72794 8.72156 8.71517 8.70878 8.70240 8.69601 8.69601
21000 21100 21200 21300 21300 21500 21500 21600 21700 21800 21900	20979 21079 21178 21278 21378 21578 21578 21677 21777 21877	1032-80 1032-38 1031-97 1031-55 1031-14 1030-72 1030-31 1029-89 1029-48 1029-06	1.0627 - 5 1.0620 1.0613 1.0606 1.0599 1.0592 1.0586 1.0579 1.0572	8.83807 - 1 8.83233 8.82659 8.82659 8.81511 8.80937 8.80362 8.79787 8.79212 8.78637	2.6965 - 4 2.7040 2.7145 2.7190 2.7265 2.7281 2.7281 2.7283 2.7570 2.7646	1.71500 + 0 1.7197h 1.72451 1.72929 1.73809 1.73890 1.7437h 1.74658 1.75385	3.5319 - 6 3.5293 3.5241 3.5241 3.5215 3.5189 3.5162 3.5163 3.5110 3.5084	8.68322 - 1 8.67683 8.67054 8.65765 8.65765 8.65125 8.64485 8.63845 8.63265 8.62565
22000 22100 22200 22300 22500 22500 22500 22600 22700 22900	21977 22077 22176 22276 22376 22376 22576 22576 22675 22775 22875	1028.65 1028.23 1027.82 1027.40 1026.98 1026.57 1026.57 1025.73 1025.32 1024.90	1.0558 - 5 1.0554 1.0554 1.0537 1.0530 1.0523 1.0516 1.0509 1.0502 1.0495	8.78062 - 1 8.77486 8.76910 8.76334 8.75758 8.75758 8.75181 8.74605 8.74605 8.73451 8.72873	2.7723 - 4 2.7801 2.7876 2.7956 2.6034 2.8034 2.8172 2.8172 2.8271 2.8350 2.8429	1.76323 + 0 1.76815 1.77309 1.77804 1.77804 1.78800 1.78800 1.79803 1.80307 1.80813	3.5058 - 6 3.5032 3.5006 3.4980 3.4954 3.4952 3.4902 3.4850 3.4850	8.61925 - 1 8.61284 8.60644 8.60003 8.59362 8.58721 8.58080 8.57439 8.56798

TABLE XI.—Continued

GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude	Sound speed	F	of viscosity		viscosity	Thermal	conductivity
H, ft	Z, ft	C _s ,	μ , lib. ft $^{-1}$ sec $^{-1}$.	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^-$ 1	$\frac{\eta}{\eta_0}$	k _{j.} BTU ft ^{-l'} sec ^{-l} (°R) ^{-l}	- <u>k</u>
23000 23100 23200 23200 23300 23400 23500 23600 23700 23900	23126 23226 23326 23426 23527 23627 23727	1024.38 1023.96 1023.54 1023.57 1022.28 1021.86 1021.86 1021.44 1021.02	1.0487 - 5. 1.0480 1.0473 1.0466 1.0452 1.0452 1.0445 1.0431 1.0424	8.72149 - 1 8.71570 8.70991 8.70412 8.99832 8.69252 8.68672 8.68092 8.67511 6.66930	2.8530 - 4 2.8610 2.8691 2.8771 2.8853 2.8934 2.9016 2.9098 2.9181 2.9263	1.81%50 + 0 1.81%61 1.82%7% 1.82%7% 1.825506 1.8%52% 1.8%5%5 1.855%7 1.855%91 1.86117	3.4791 - 6 3.4765 3.4765 3.4739 3.4713 3.4686 3.4686 3.4688 3.4582 3.4582 3.4555	8.55352 - 1 8.54709 8.54066 8.53423 8.52780 8.52136 8.51492 8.50849 8.50849 8.50205
24000 24100 24200 24300 24500 24500 24600 24700 24800 24900	24128 24228 24328 24429 24529 24629 24729 24830	1020.18 1019.76 1019.34 1018.92 1018.50 1018.08 1017.66 1017.24 1016.82	1.0417 - 5 1.0410 2.0403 1.0396 1.0389 1.0382 1.0375 1.0368 1.0361	8.66349 - 1 8.65768 8.65167 8.64505 8.645023 8.63441 8.62859 8.62276 8.61111	2.9346 - 4. 2.9430 2.9513 2.9513 2.9561 2.9766 2.9851 2.9936 3.0021 3.0107	1.86645 + 0 1.87175 1.87707 1.887707 1.88240 1.89876 1.89853 1.90395 1.90395 1.90988	3.4529 - 6 3.4503 3.4677 3.4451 3.4451 3.4324 3.4398 3.4372 3.4346 3.4319 3.4293	8.48917 - 1 8.48272 8.46723 8.46733 8.46339 8.45504 8.45504 8.45504 8.43759 8.43114
25000 25100 25200 25300 25400 25500 25600 25700 25800 25900	25130 25230 25331 25431 25531 25631 25732 25632	1015.98 1015.55 1015.13 1014.71 1014.29 1013.86 1013.44 1013.02 1012.60 1012.17	1.0347 - 5 1.0340 1.0333 1.0326 1.0319 1.0312 1.0305 1.0298 1.0291	8.60528 - 1 8.59944 8.59361 8.58777 8.58193 8.57609 8.57024 8.56440 8.556440 8.55855 8.55270	3.0193 - 4 3.0280 3.0366 3.0453 3.0541 3.0628 3.0716 3.0804 3.0893 3.0982	1.92031 + 0 1.92580 1.93132 1.93685 1.93241 1.93586 1.95358 1.95919 1.96483 1.97048	3.4267 - 6: 3.4214 3.4214 3.4168 3.4162 3.4136 3.4136 3.4083 3.4057 3.4031	8.42469 - 1 8.41127 8.411177 8.40532 8.39886 8.39240 8.38594 8.37948 8.37301 8.36655
26000 26100 26200 26300 26500 26500 26500 26700 26900	26133 26233 26333 26433 26534 26634 26734 26034	1011.75 1011.33 1010.90 1010.48 1010.05 1009.63 1009.20 1008.78 1008.36 1007.93	1.0277 - 5 1.0270 1.0245 1.0256 1.0259 1.0242 1.0235 1.0227 1.0220 1.0213	8.54685 - 1 8.54099 8.53513 8.52927 8.522341 6.51755 8.51168 8.50581 8.499094 8.49407	3.1071 - 4 3.1251 3.1251 3.1341 3.1382 3.1523 3.1523 3.1614 3.1705 3.1797 3.1890	1.97616 + 0 1.98186 1.98758 1.99332 1.99908 2.00486 2.01067 2.01649 2.0234 2.02821	3.4004 - 6 3.3978 3.3952 3.3955 3.3899 3.3873 3.3046 3.3820 3.3794 3.3767	8.36008 - 1 8.35362 8.34715 8.34068 8.33421 8.32773 8.32126 8.31479 8.30831 8.30183
27000 27100 27200 27300 27400 27500 27600 27700 27800 27900	27135 27236 27336 27436 27536 27637 27737 27837	1007.51 1007.08 1006.65 1006.23 1005.80 1005.38 1004.95 1004.52 1004.10	1.0206 = 5 7.0199 1.0192 1.0185 1.0175 1.0171 1.0164 1.0157 1.0150 1.0143	8.48819 — 1 8.48232 8.47644 8.47056 8.46467 8.45879 8.45290 8.45701 8.44111 8.43522	3.1982 - 4 3.2075 3.2168 3.2262 3.2356 3.2450 3.2545 3.2640 3.2736 3.2631	2.03410 + 0 2.04001 2.04594 2.05190 2.05787 2.06990 2.07594 2.08201 2.08810	3.3741 6 3.3715 3.3688 3.3662 3.3635 3.3639 3.3536 3.3556 3.35530 3.3550	8.29536 - 1 8.28858 8.28240 8.27592 8.26943 8.26295 8.26546 8.24998 8.243549 8.243549
28000 28100 28200 28300 28300 28300 28300 28300 28800 28900		1003.24 1002.82 1002.39 1001.96 1001.53 1001.11 1000.68 1000.25 999.82	1.0135 - 5 1.0128 1.0121 1.0114 1.0107 1.0100 1.0095 1.0086 1.0079	8.42932 - 1 8.42342 8.41752 8.41162 8.40571 8.39980 8.39389 8.38296 8.38206 8.37615	3.2927 - 4 3.3024 3.3121 3.3218 3.3315 3.3413 3.3512 3.3610 3.3709 3.3809	2.09421 + 0 2.10034 2.10650 2.11268 2.11268 2.12511 2.13136 2.13764 2.14394 2.15026	3.3477 6 3.3451 3.3424 3.3398 3.3372 3.3345 3.3319 3.3292 3.3266 3.3239	8.23051 - 1 8.22802 8.21752 8.21103 8.20454 8.19804 8.19154 8.19504 8.17854 8.17854
29000 29100 29200 29300 29500 29500 29600 29700 29800 29900	29040 29141 29241 29341 29442 29542 29642 29742 29843 29943	998.98 998.53 998.10 997.67 997.25 996.82 996.39 995.96 995.53	1.004% - 5 1.0057 1.0050 1.0043 1.0029 1.0022 1.0015 1.0007	8.37023 - 1 8.36430 8.35838 8.35245 8.34652 8.34659 8.33466 8.32873 8.32279 8.31685	3.3908 - 4 3.4009 3.4109 3.4210 3.4311 3.4515 3.4515 3.4517 3.4720 3.4623	2.15660 + 0 2.16297. 2.16936 2.17578 2.18222 2.18869 2.19518 2.20169 2.20823 2.21479	3.3213 - 6 5.3186 3.3160 5.3134 3.3107 3.3081 3.3054 3.3028 3.3001 5.2975	8.1655% - 1 8.15903 8.15253 8.14602 8.13952 8.13301 8.12650 8.11999 8.11347 8.10696
30000 30100 30200 30300 30500 30500 30500 30600 30600	30043 30144 30244 30344 30444 30545 30645 30745 30846 30946	994.86 994.23 993.80 993.37 992.94 992.51 992.08 991.64 991.21 990.76	9.9931 - 6 9.9859 9.9785 9.9716 9.9645 9.9573 9.9502 9.9430 9.9358 9.9287	8.31091 - 1 8.309901 8.29901 8.29307 8.28711 8.28116 8.27520 8.26925 8.26329 8.25732	3.4927 - 4 3.5031 3.5135 3.5135 3.5345 3.5345 3.5557 3.5663 3.5770 3.5877	2.22138 + 0 2.22799 2.23%63 2.24129 2.25%70 2.25%10 2.25%10 2.26%40 2.26%20 2.27%99 2.28181	3.2948 - 6 3.2922 3.2895 3.2869 3.2842 3.2816 3.2769 3.2763 3.2736 3.2709	8.10045 - 1 8.09393 8.08741 8.08090 8.07438 8.04785 8.04133 8.05481 8.04828 8.04176
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TABLE XI.--Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Alfatude	Sound	Coefficient	of viscosity	Kinematic	viscosity	Thermal o	conductivity
Z, ft H, ft	C _s ,	μ , lb ft sec sec	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k, BTU ff ⁻¹ sec ⁻¹ (°R) ⁻¹	<u>k</u> k _O
23000 22975 23100 23074 23200 23174 23300 23374 23300 23373 23500 23373 23700 23573 23700 23673 23900 23573	1024.48 1024.06 1023.65 1023.23 1022.81 1022.39 1021.98 1021.56 1021.14	1.0489 - 5 1.0462 1.0475 1.0468 1.0461 1.0454 1.0457 1.0447 1.04433 1.0426	8.72296 - 1 8.71718 8.71718 8.70562 8.69984 8.69985 8.68827 8.68248 8.67669	2.8509 - 4 2.8589 2.8670 2.8750 2.8831 2.89913 2.8994 2.9076 2.9158 2.9241	1.81321 + 0 1.81830 1.82342 1.82955 1.83370 1.83387 1.84406 1.24926 1.85499	3.4798 - 6 3.4745 3.4745 3.4719 3.4667 3.4641 3.4615 3.4589 3.4563	8.55515 - 1 8.54874 8.54232 8.53590 8.52948 8.52306 8.51664 8.51022 8.457377
24000 23972 24100 24072 24200 24172 24300 24272 24500 24371 24500 24571 24600 24571 24600 24571 24800 24771 24800 24771	1020.30 1019.88 1019.46 1019.04 1018.62 1018.20 1017.78 1017.36 1016.94 1016.52	1.0419 - 5 1.0412 1.0405 1.0398 1.0391 1.0377 1.0377 1.0363 1.0356	8.66510 - 1 8.65930 8.65350 8.64770 8.64189 8.63609 8.63028 8.62447 8.61865 8.61284	2.9323 - 4 2.9406 2.9490 2.9573 2.9657 2.9742 2.9826 2.99311 2.9996 3.0082	1.86499 + 0. 1.87027 1.87557 1.88089 1.88623 1.99159 1.89697 1.90236 1.90778	3.4536 - 6 3.4510 3.4484 3.4432 3.4432 3.4406 3.4380 3.4353 3.4327 3.4301	8.49094 - 1 8.48452 8.47809 8.47166 8.46523 8.45879 8.45236 8.44593 8.43949 8.43306
25000 25970 25100 25070 25200 25170 25300 25269 25300 25369 25500 25569 25600 25569 25700 2568 25800 25768 25900 25868	1016-10 1015-68 1015-26 1016-84 1016-84 1016-80 1013-57 1013-15 1012-73 1012-31	1.0349 - 5 1.0342 1.0335 1.0328 1.0321 1.0314 3.0307 1.0293 1.0293	8.60702 - 1 8.60120 8.59536 8.58956 8.58374 8.57791 8.57208 8.56625 8.56041 8.55458	3.0167 4 3.0253 3.0340 3.0427 3.0514 3.0601 3.0609 3.0777 3.0865 3.0953	1.91867 + 0 1.92818 1.92968 1.93515 ** 1.94069 1.94624 1.95182 1.95741 1.96866	3.4275 - 6 3.4222 3.4196 3.4170 3.4144 3.4118 3.4091 3.4065 3.4039	8.42662 - 1 8.42018 8.41374 8.40730 8.40085 6.39441 8.38797 8.38152 8.37507 8.36863
26000 25968 26100 26067 26200 26167 26300 26267 26500 25666 26600 26566 26700 26666 26800 26766 26900 26865	1011.89 1011.46 1011.04 1010.62 1010.20 1009.77 1009.35 1008.93 1008.50 1008.08	1.0279 - 5 1.0272 1.0225 1.0258 1.0258 1.02244 7.0237 1.0230 1.0223	8.54874 - 1 8.54270 6.53706 8.53121 8.52537 8.51952 8.51367 8.50782 8.50196 8.49610	3.1042 - 4 3.1132 3.1221 	1.97432 + 0 1.98000 1.98570 1.99141 1.99715 2.00291 2.00870 2.01450 2.02032 2.02617	3.4013 - 6 3.3980 3.3934 3.3908 3.3881 3.3881 3.3829 3.3829 3.3803 3.3776	8.36218 - 1 8.35573 8.34927 8.34282 8.33637 8.32346 8.32346 8.31700 8.31054 8.30408
27000 26965 27100 27065 27200 27165 27300 27264 27800 27364 27500 27864 27700 27663 27800 27763 27800 27763	1007.65 1007.23 1006.80 1006.38 1005.96 1005.53 1005.11 1004.68 1004.25 1003.83	1.0209 - 5 1.0202 1.0195 1.0188 3.0181 1.0173 1.0166 1.0159 1.0152 1.0145	8.49024 1 8.48438 8.47852 8.47265 8.46679 8.46692 8.45505 8.44917 8.44329 0.43742	3.1950 - 4 3.2042 3.2135 3.2229 3.2322 3.2316 3.2511 3.2505 3.2700 3.2796	2.03204 + 0 2.03793 2.04384 2.04977 2.05572 2.06170 2.06770 2.07372 2.07372 2.08582	3.3750 - 6 3.3724 3.3678 3.3671 3.3645 3.3619 5.3592 3.3550 3.3550	8.29762 - 1 8.29116 8.28469 8.27823 8.27176 8.25533 8.25583 8.25583 8.25583
28000 27962 28100 28062 28200 28262 28300 28262 28400 28561 28500 28561 28600 28561 28700 28661 28800 28760 28800 28760	1003.40 1002.98 1002.55 1002.12 1001.70 1001.27 1000.84 1000.42 999.99 999.56	1.0138 - 5 1.0131 1.0124 1.0117 1.0110 1.0103 1.0096 1.0089 1.0081	8.43154 - 1 8.42565 8.41977 8.41388 8.40799 8.40210 8.39621 8.39031 8.396841 8.37851	3.2691 - 4 3.2987 3.3084 3.3181 3.3278 3.3375 3.3473 3.3571 3.3670 3.3769	2.09191 + 0 2.09802 2.10415 2.11031 2.11649 2.1269 2.12891 2.13516 2.14143 2.14773	3.3487 - 6 3.3461 3.3408 3.3408 3.3392 3.3355 3.3329 3.3276 3.3250	8.23295 - 1 8.22647 8.22000 8.21352 8.2070h 8.20057 8.19409 8.18761 8.18112 8.17464
29000 28960 29100 29059 29200 29159 29300 29259 29400 29558 29400 29558 29400 29558 29400 29557 29900 29557	999.14 998.71 998.28 997.85 997.82 998.99 996.57 996.14 995.71	1.0067 - 5 1.0060 1.0053 1.0046 1.0039 1.0032 1.0025 1.0010 1.0010	8.37261 - 1 8.36671 8.36678 8.35489 8.34898 8.34307 6.337.15 8.33123 8.32531 8.31939	3.3868 - 4 3.3968 3.4068 3.4168 3.4269 3.4370 3.4472 3.4574 3.4574	2.15404 + 0 2.16038 2.16037 2.17314 2.17955 2.18599 2.19245 2.19245 2.20544 2.20544	3.3224 - 6 3.3197 3.3171 3.3144 3.3092 3.3095 3.3095 3.3012 3.2986	8.16816 - 1 8.16167 8.15519 8.14870 8.14221 8.13572 8.12923 8.12923 8.12274 8.11624 8.10975
30000 29957 30100 30057 30200 30156 30300 30256 30400 30555 30500 30555 30700 30555 30900 30555	994.85 994.42 993.99 993.56 993.13 992.70 992.27 991.84 991.41 990.98	9.9962 - 6 9.9891 9.9819 9.9748 9.9675 9.9605 9.9534 9.9462 9.9311	8.31347 - 1 8.30754 8.30761 8.29568 8.28975 8.28381 8.27788 8.27788 8.26599	3.4882 - 4 3.4986 3.5090 3.5194 3.5299 3.5404 3.5509 3.55015 3.5721 3.5828	2.21854 + 0 2.22512 2.23173 2.23836 2.24502 2.24502 2.25170 2.25841 2.26515 2.27191 2.27869	3.2960 - 6 3.2937 3.2907 3.2880 3.2854 3.2827 3.2827 3.2801 3.2774 3.2748	8.10325 - 1 8.09676 8.09026 8.08376 8.07726 8.07726 8.06426 8.05775 6.05125 8.04474

TABLE VI.—Confinued

GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altif	lude	Sound spaed	Coefficient	of viscosity	Kinematic	viscosity	Thermal o	conductivity
H, ft	Z, ft	C _s ,	μ , lb ft sec sec s	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k., BTU ff ⁻¹ sec ⁻¹ (°R) ⁻¹	k k _O
31000 31100 31200 31300 31400 31500 31600 31700 31800	31046 31146 31247 31347 31347 31548 31648 31648 31849 31949	990.35 989.91 989.48 989.05 988.61 988.18 987.75 987.31 986.88	9.9215 - 6 9.9143 9.9071 9.9000 9.8928 9.8856 9.8712 9.8712 9.8640 9.8568	8.25136 - 1 8.24539 8.23942 8.23345 8.22148 8.22150 8.21552 8.20954 8.20356 8.19757	3.5985 - 4 3.6093 3.6201 3.6310 3.6419 3.6529 3.6749 3.6749 3.6860 3.6972	2.28866 + 0 2.29552 2.30242 2.30934 2.31629 2.32327 2.33027 2.33730 2.34435 2.35144	3.2683 - 6 3.2656 3.2630 3.2630 3.2577 3.2550 3.2550 3.2524 3.2497 3.2497	8.03523 - 1 8.02870 8.02217 8.01564 8.00911 8.00258 7.99605 7.98951 7.98975 7.97644
32000 32100 32200 32300 32400 32500 32600 32700 32800 32900	32049 32149 32250 32350 32450 32551 32651 32751 32852 32952	986.01 985.58 985.14 984.71 984.27 983.83 983.40 982.96 982.53 982.09	9.8424 9.8424 9.8352 9.8208 9.8208 9.8136 9.8064 9.7991 9.7919	8.19158 - 1 8.18559 8.17960 8.17361 8.16761 8.16761 8.15561 8.18960 8.18360 8.18360	3.7084 - 4 3.7196 3.7308 3.7422 3.7535 3.7649 3.7763 3.7878 3.7994 3.8109	2.35855 + 0 2.36568 2.37285 2.38004 2.38726 2.39726 2.40179 2.40109 2.41642 2.42379	3.2417 - 6 3.2391 3.2354 3.2337 3.2311 3.2254 3.2257 3.2231 3.2204 3.2178	7-96990 - 1 7-96336 7-95681 7-95027 7-94373 7-93718 7-93064 7-92409 7-91754 7-91099
33000 33100 33200 33300 33500 33500 33600 33700 33800 33900	33052 33153 33253 33353 33454 33554 33654 33755 33855 33955	981.65 981.22 980.78 980.34 979.47 979.47 979.03 978.59 978.16	9.7775 - 6 9.7762 9.7630 9.7558 9.7485 9.7413 9.7340 9.7268 9.7195	8.13158 - 1 8.12556 6.11955 8.11353 8.10751 8.10149 8.09546 8.08943 8.08340 8.07737	3.8226 - 4 3.8342 3.8459 3.8577 3.8577 3.8695 3.8813 3.8932 3.9052 3.9172 3.9292	2.43118 + 0 2.43859 2.44604 2.45352 2.46102 2.46856 2.47612 2.48372 2.49134 2.499399	3-2151 - 6 = 3-2124 3-2129 3-2098 3-2014 3-2018 3-1991 3-1958 3-1911	7.90444 - 1 7.90789 7.909133 7.88478 7.87822 7.87166 7.86511 7.85855 7.85199 7.84542
34000 34100 34200 34300 34500 34500 34600 34700 34800 34900	34056 34156 34256 34357 34457 34557 34558 34758 34758 34959	977.28 976.84 976.40 975.96 975.52 975.08 974.65 974.21 973.77	9.7050 - 6 9.6978 9.6905 9.6833 9.6760 9.6687 9.6614 9.6542 9.6469 9.6396	8.0713h - 1 8.06530 8.055926 8.055928 8.05322 8.04718 8.04713 8.02508 8.02903 8.02298 8.01692	3.9413 - 4 3.9534 3.9656 3.9778 3.9901 4.0024 4.0147 4.0272 4.0396 4.0521	2.50668 + 0 2.51439 2.52213 2.52991 2.53771 2.53771 2.56131 2.56131 2.56928 2.57720	3-1884 - 6 3-1857 3-1851 3-1804 3-1777 3-1751 3-1724 3-1697 3-1670 3-1644	7.83886 - 1 7.83230 7.82573 7.81916 7.81259 7.810603 7.79945 7.79288 7.78631 7.77974
35000 35200 35400 35600 35600 36000 36200 36400 36600	35059 35260 35460 35661 35862 36062 36263 36464 36664 36865	972.89 972.00 971.12 970.24 969.36 968.47 968.08 968.08 968.08	9.6323 - 6 9.6177 9.6032 9.5886 9.5739 9.5593 9.5528 9.5528 9.5528	8.01086 - 1 7.97874 7.98661 7.97447 7.96231 7.95015 7.94472 7.94472 7.94472 7.94472	4.0647 - 4 4.0700 4.1155 4.1411 4.1670 4.1931 4.2273 4.2681 4.3093 4.3510	2.58519 + 0 2.60127 2.61747 2.63380 2.65027 2.66686 2.68858 2.71455 2.74077 2.76725	3.1617 - 6 3.1563 3.1550 3.1456 3.1403 3.1303 3.1325 3.1325 3.1325 3.1325	7.77316 - 1 7.76001 7.74685 7.73368 7.72051 7.70734 7.70146 7.70146 7.70146 7.70146
37000 37200 37400 37500 37800 38000 38200 38400 38800	37066 37266 37467 37668 37869 38069 38270 38471 38672 38872	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	4.3930 - 4.4.4783 4.4783 4.5215 4.5652 4.6538 4.6988 4.6788 4.7481	2.79397 + 0 2.82096 2.84821 2.87572 2.97350 2.93154 2.93986 2.98845 3.01731 3.04646	3-1325 - 6 3-1325 3-1325 3-1325 3-1325 3-1325 3-1325 3-1325 3-1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
39000 39200 39400 39600 39800 40200 40200 40400 40600 40800	39073 39274 39475 39475 39876 40077 40278 40478 40479 40880	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	4.8362 - 4 4.8829 4.9301 4.9777 5.0258 5.0744 5.1234 5.1729 5.2228 5.2733	3.07588: + 0. 3.10559 3.16588 3.19686 3.22733 3.25850 3.28998 3.32176 3.35384	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
\$1000 \$1200 \$1800 \$1600 \$2000 \$2200 \$2400 \$2800 \$2800	\$1081 \$1282 \$1382 \$1683 \$1864 \$2085 \$2286 \$2486 \$2687 \$2888	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	5.3242 - 4 5.3756 5.4275 5.4829 5.5329 5.5863 5.6403 5.64048 5.7498 5.8053	5.38624 + 0 3.41894 3.45197 3.48531 3.51898 3.55297 3.58728 3.62193 3.65692 3.69224	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
42800	·92666	968.08	9. 5528	7.94472	5.8053	3.09224	3- 1525	7.10146

TABLE TIT-Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Alti	tude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal o	onductivity
Z, ft	H, ft	C _s ,	μ , lb ff sec.	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k, BTU fti sec (PR)	k ko
31000 31100 31200 31300 31400 31500 31600 31700 31800 31900	30954 31054 31153 31253 31353 31452 31552 31652 31752 31851	990.55 990.11 989.68 989.25 988.82 988.39 987.95 987.95 987.09 986.66	9.9248 - 6 9.9176 9.9105 9.9033 9.8962 9.8810 9.8717 9.8675 9.8603	8.25410 - 1 8.24220 8.24220 8.23625 8.23030 3.22434 8.21838 8.21282: 8.21282: 8.20645	3.5935 - 4 3.6043 3.6151 3.6259 3.6368 3.6477 3.6586 3.6696 3.6697 3.6917	2.28550 + 0 2.2934 2.29930 2.30609 2.31301 2.31995 2.32692 2.33391 2.34093 2.34798	3.2695 - 6 3.2692 3.2692 3.2616 3.2589 2.2563 3.2536 3.2510 3.2483 3.2457	6.03824 - 8.03173 8.02522 8.01871 8.01220 8.00568 7.999!7 7.99265 7.98614 7.97962
32000 32100 32200 32300 32400 32500 32600 32700 32800 32900	31951 32051 32150 32250 32350 32349 32549 32649 32748 32848	986.22 985.79 985.36 984.92 984.49 984.05 983.62 983.19 982.75 982.32	9.8532 - 6 9.8860 9.8388 9.8316 9.8244 9.8172 9.8100 9.8028 9.7956 9.7884	8.19452 - 1 8.18855 8.18258 8.17660 8.17062 8.16464 8.15866 8.15268 8.14669	3.7029 - 4 3.7140 3.7252 3.7365 3.7478 3.7591 3.7705 3.7819 3.77934 3.8049	2.35506 + 0 2.36216 2.36929 2.37644 2.38363 2.39084 2.39808 2.40535 2.41264 2.41997	3.2430 - 6 3.2404 3.2377 3.2351 3.2324 3.2298 3.2271 3.2244 3.2218 3.2191	7.97310 - 7.96658 7.96006 7.95354 7.94702 7.94049 7.93397 7.92744 7.92091 7.91438
33000 33100 33200 33300 33400 33500 33600 33700 33800 33900	32948 33048 33147 33247 33346 33546 33546 33745 33845	981.88 981.45 981.01 980.58 980.14 979.70 979.27 978.83 978.40 977.96	9.7812 - 6 9.7740 9.7668 9.7594 9.7524 9.7452 9.7380 9.7307 9.7235 9.7163	8.13471 - 1 8.12872 8.12272 8.11672 8.11672 8.110472 8.09872 8.09271 8.08670 8.08069	3.8165 - 4 3.8281 3.8397 3.8514 3.8632 3.8750 3.8668 3.9987 3.9106 3.9226	2.42732 + 0 2.43471 2.44955 2.45701 2.45701 2.47203 2.47203 2.47958 2.48717 2.49478	3.2165 - 6 3.2138 3.2112 3.2085 3.2059 3.2032 3.2005 3.1979 3.1952 3.1926	7.90785 - 7.90132 7.89979 7.85626 7.88172 7.87519 7.86865 7.86211 7.85557 7.84903
34000 34100 34200 34300 34300 34500 34500 34700 34800 34900	33945 34044 34144 34244 34343 34443 34543 34642 34742 34042	977.52 977.09 976.65 976.21 975.77 975.34 974.90 974.46 974.02	9.7091 - 6 9.7018 9.6946 9.6873 9.6801 9.68729 9.6656 9.6584 9.6511 9.6439	8.07468 - 1 8.06866 8.06264 8.05062 8.05060 8.04458 8.03855 8.03252 8.022649 8.02045	3.93% - 4 3.9%6 3.9587 3.9709 3.9831 4.0077 4.0200 4.032%	2.50242 + 0 2.51009 2.51779 2.52553 2.53329 2.54108 2.54890 2.55676 2.56464 2.57255	3.1899 - 6 3.1872 3.1846 3.1819 3.1792 3.1796 3.1739 3.1713 3.1686 3.1659	7.84249 7.83595 7.82941 7.82286 7.81632 7.80322 7.79667 7.79012 7.78357
35000 35200 35400 35400 35800 36000 36200 36400 36600 36800	34941 35141 35340 35539 35739 35739 36137 36337 36337 36536 36735	973.14 972.27 971.39 970.51 969.63 968.74 968.08 968.08 968.08	9.6366 - 6 9.6221 9.6075 9.5930 9.5784 9.5528 9.5528 9.5528 9.5528	8.01442 - 1 8.00234 7.99025 7.97815 7.97604 7.95393 7.94472 7.94472 7.94472 7.94472	4.0573 - 4 4.0825 4.1078 4.1333 4.1591 4.1850 4.2185 4.2551 4.2961 4.3374	2.58050 + 0 2.59549 2.61260 2.62884 2.64520 2.66170 2.68049 2.70629 2.73234 2.75864	3.1633 - 6 3.1579 3.1526 3.1473 3.1419 3.1366 3.1325 3.1325 3.1325 3.1325	7.77702 - 7.76391 7.75079 7.73768 7.72455 7.71143 7.70146 7.70146 7.70146
37000 37200 37400 37600 37600 38000 38200 38400 38400 38600	36934 37134 37333 37532 37732 37931 38130 38329 38529 38728	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	4.3792 - 4 4.4213 4.4639 4.5508 4.5502 4.5590 4.6382 4.6828 4.7734	2.78519 + 0 2.81199 2.83906 2.86638 2.89397 2.92182 2.94994 2.97833 3.00699 3.03592	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
39000 39000 39000 39800 39800 40000 40200 40400 40600 40800	38927 39126 39326 39525 39724 39923 40123 40322 40521 40720	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 — 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	4.8193 - 4 4.8657 4.9125 4.9598 5.0075 5.00557 5.1044 5.1535 5.2031	3.06514 + 0 3.09463 3.12441 3.15448 3.18483 3.21547 3.24641 3.27765 3.30918 3.34102	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
\$1000 \$1200 \$1400 \$1800 \$2000 \$2200 \$2800 \$2800 \$2800	40920 41119 41318 41517 41716 41916 42115 42314 42513	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	5.3037 - 4 5.3547 5.4062 5.4582 5.5107 5.5637 5.6173 5.6713 5.7258 5.7809	3.37317 + 0 3.40562 3.43839 3.47146 3.50486 3.53858 3.57262 3.60699 3.64168 3.67672	3.1325 ~ 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146

TABLE VI.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altil	lude	Sound		of viscosity	Γ		Thermal o	onductivity
H, ft	∠Z, ft	C _s ,	μ , lb ft $^{-1}$ sec $^{-1}$	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^-$ 1	$\frac{\eta}{\eta_0}$	k', BTU.ff ^{-l} sec ^{-l} (°R) ^{-l}	k k _O
\$3000 \$3200 \$3600 \$3600 \$3800 \$4000 \$4200 \$4000 \$4800	43089 43290 43491 43691 43892 44093 44294 44696 44696	948.08 948.08 948.08 948.08 948.08 948.08 948.08 948.08 948.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 3. 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	5.8614 - 4 5.9180 5.9752 6.0329 6.0912 6.1500 6.2094 6.2694 6.3911	3.72790 + 0 3.76391 3.80027 3.83697 3.87404 3.91146 3.94924 3.98738 4.02590 4.06478	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.701% - 1-7.701% - 1-7.701% - 7.701% -
\$5000 \$5200 \$5400 \$5800 \$6000 \$6200 \$6200 \$6600 \$6600	45097 45298 45459 45700 45901 46102 46303 46503 46704 46905	748.08 748.08 748.08 748.08 748.08 748.08 748.08 748.08 748.08	9:5528 - 6 9:5528 9:5528 9:5528 9:5528 9:5528 9:5528 9:5528 9:5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	6.4528 - 4 6.5151 6.5781 6.4416 6.77058 6.7705 6.8359 6.9020 6.9686 7.0359	4.10404 + 0 4.14369 4.18371 4.22412 4.26492 4.30612 4.38970 4.38970 4.43210 4.47491	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.701%6 - 1 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6
\$7000 \$7200 \$7\$00 \$7\$00 \$7800 \$8000 \$8200 \$8\$00 \$8\$00	47106 47307 47508 47709 47910 48111 48312 40513 48714 48914	948.08 948.08 948.08 948.08 948.08 948.08 948.08 948.08 948.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	7.1039 - 4 7.1725 7.2418 7.3117 7.3524 7.4537 7.5257 7.5984 7.6718 7.7459	4.5181% + 0 4.56178 4.6058% 4.65033 4.66525 4.74060 4.78639 4.83262 4.87930 4.92643	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1: 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
49000 49200 49400 49400 49800 50000 50200 50400 50800	49115 49316 49517 49718 49919 50120 50321 50522 50723 50924	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	7.8207 - 4 7.8962 7.9725 8.0495 8.1272 8.2057 8.2050 8.3650 8.3650 8.458 8.5274	4.97h01 + 0 5.02206 5.07057 5.1195h 5.16899 5.21892 5.26933 5.37161 5.42350	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70186 - 1: 7.70186 7.70186 7.70186 7.70186 7.70186 7.70186 7.70186 7.70186 7.70186 7.70186
51000 51200 51400 51400 51800 52000 52000 52400 52400 52800	51125 51326 51527 51728 51929 52130 52331 52532 52733 52934	743.08 748.08 748.08 748.08 748.08 748.08 748.08 748.08 748.08	9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	B:6098 = 4 B:6929 8.7749 8.8617 8.9473 9.0337 9.1209 9.2090 9.2980 9.3878	5.47589 + 0 5.52878 5.58218 5.63610 5.64955 5.74550 5.80100 5.85703 5.91360 5.97072	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.701%6 - 1 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6
000 KZ 000 KZ 000 KZ 000 KZ 000 KZ 000 KZ 000 KZ 000 KZ 000 KZ 000 KZ	53135 53334 53537 53738 53939 54140 54341 54542 54743 54944	948.08 948.08 948.08 948.08 948.08 948.08 948.08 948.08 948.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94672 - 1 7.94672 7.94672 7.94672 7.94672 7.94672 7.94672 7.94672 7.94672 7.94672	9.4785 - 4 9.5700 9.6625 9.7558 9.8500 9.9452 1.0041 - 3 1.0138 1.0236 1.0335	6.02840 + 0 3.08662 6.14541 6.20477 6.26471 6.32522 6.38631 6.44800 6.51028 6.57316	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
55000 55200 55400 55400 55800 54000 54200 54400 54800	55145 55347 55548 55749 55950 56151 56352 56353 56754 56935	748.08 748.08 748.08 748.08 748.08 748.08 748.08 748.08 748.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.0435 - 3 1.0536 1.0637 1.0740 1.0844 1.0944 1.1054 1.1163 1.1269 1.1378	8.63665 + 0 6.76076 6.76548 3.83083 6.86382 7.03068 7.09859 7.16716 7.23639	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.701%6 - 1 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6
57000 57200 57400 57400 57800 58000 58200 58400 58400 58800	57156 57357 57558 57760 57760 58162 58363 58365 58765	748.08 748.08 748.08 748.08 748.08 748.08 748.08 748.08 748.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.1488 - 3 1.1599 1.1711 1.1824 1.1938 1.2053 1.2170 1.2267 1.2406 1.2526	7.30628 + 0 7.37685 7.44811 7.52005 7.57269 7.66602 7.74007 7.81883 7.89032 7.96653	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 5.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
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TABLE VI.—Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	lude-	Sound speed	 	of viscosity		viscosity	Thermal o	conductivity
Z, fi	H, ft	C _s ,	μ , lb ft sec sec sec sec sec sec sec sec sec sec	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k, BTUff ^{-l} sec ^{-l} (°R) ^{-l}	<u>k</u> k _O
#3000 #3200 #3400 #3500 #3500 #4000 #4600 #4600 #4600	42912 43111 43310 43509 43708 43907 44107 44306 44505 44704	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.54472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	5.8365 - 4 5.8927 5.9494 6.0066 6.0644 6.1227 6.1816 6.2410 6.3010 6.3616	3.71208 + 0 3.74779 3.78304 3.82023 3.85598 3.99409 3.93153 3.96934 4.00752 4.04606	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
45000 45200 45400 45600 45600 46000 46200 46400 46600 46800	44903 45102 45301 45501 45501 45899 46098 46297 46496 46695	948.08 948.08 948.08 948.08 948.08 948.08 948.08 948.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	6.4228 - 4 6.4846 6.5470 6.6099 6.6735 6.7377 6.8025 6.8679 6.9339 7.0006	4.08498 + 0 4.12426 4.16392 4.20397 4.24440 4.26521 4.32642 4.36802 4.36802 4.45243	3. 1325 - 6 3. 1325 3. 1325 3. 1325 3. 1325 3. 1325 3. 1325 3. 1325 3. 1325 3. 1325	7-70146 - 1. 7-70146 7-70146 7-70146 7-70146 7-70146 7-70146 7-70146 7-70146 7-70146
#7000 #7200 #7400 #7400 #7600 #8000 #8200 #8400 #8600	46894 47093 47293 47492 47691 47690 48089 48286 48487 48686	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	7.0679 - 4 7.2045 7.2045 7.2737 7.3437 7.4143 7.4856 7.5575 7.6302 7.7036	4.49524 + 0 4.53847 4.58211 4.62616 4.67064 4.71555 4.76089 4.80666 4.85287 4.89952	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
49000 49200 49400 49600 50800 50800 50400 50800	48885 49084 49283 57502 49681 49880 50079 50278 50478	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	7.7776 - 4 7.8525 7.9279 8.0041 8.0810 8.1587 8.2371 8.3163 8.3962 8.4770	4.94663 + 0 4.99418 5.04219 5.09066 5.13960 5.13961 5.23889 5.23889 5.34008 5.39141	3. 1325 - 6 3. 1325 3. 1325 3. 1325 3. 1325 3. 1325 3. 1325 3. 1325 3. 1325 3. 1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
51000 51200 51400 51600 51800 52000 52200 52400 52600 52800	50876 51075 51274 51473 51672 51871 52070 52269 52468 52667	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	8.558% - 4 8.6407 8.7237 8.8076 8.8922 8.9777 9.0640 9.1511 9.2390 9.3278	5.44324 + 0 5.49555 5.49575 5.60170 5.65554 5.70989 5.76477 5.82017 5.87611 5.93258	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.701%6 - 1 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6
53000 53200 53400 53600 54600 54200 54600 54600 54800	52846 53065 53264 53463 53462 53861 54059 54258 54457 54656	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	9.4175 - h. 9.5080 9.5993 9.6916 9.7847 9.8787 9.9737 1.0069 - 3 1.0166	5.98959 + 0 6.04715 6.10526 6.16393 6.22316 6.28296 6.34333 6.40428 6.46582 6.52794	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
55000 55200 55400 55400 55800 56200 56400 56400 56800	54855 55054 55253 55452 55452 55650 56049 56248 56447 56646	968.08 948.08 948.08 968.08 948.08 948.08 948.08 948.08 948.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.0363 - 3 1.0462 1.0563. 1.0664 1.0767 1.0787 1.0974 1.1080 1.1186 1.1294	6.59066 + 0 6.65399 6.71792 6.78246 6.84762 6.91341 6.97982 7.04688 7.11458 7.18292	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
57000 57200 57400 57400 57800 58200 58200 58400 58400 58800	54845 57044 57242 57441 57640 57636 58038 58237 58436 58635	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.1402 - 3 1.1512 1.1622 1.1734 1.1847 1.1840 1.2075 1.2191 1.2308	7.25192 + 0 7.32158 7.39192 7.36292 7.53461 7.60098 7.68005 7.75381 7.82829	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
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TABLE VI.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude	Sound speed	Υ	of viscosity			Thermal o	conductivity
H, ft	Ž, ft	C _s ,	μ , lb ft $^{-1}$ sec $^{-1}$	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	· k, ETU ff ^{-l} sec ^{-t} (PR) ^{-l}	<u>k</u> ko
59000 59200 59400 59400 59400 60000 60200 60400 60600 60800	59167 59369 59570 59771 59972 60173 60374 60575 60777 60978	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.2647 - 3 1.2769 1.2892 1.3017 1.3143 1.3270 1.3398 1.3527 1.3658 1.3790	8:04348 + 0 8:12147 8:19961 8:27881 8:35878 8:43952 8:52103 8:60334 8:68644 8:77034	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7-70146 - 1 7-70146 7-70146 7-70146 7-70146 7-70146 7-70146 7-70146 7-70146
61000 61200 61400 61600 61800 62000 62200 62400 62600 62800	61179 61380 61581 61783 61984 62185 62386 62587 62788 62990	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.3923 - 3 1.4057 1.4193 1.4330 1.4469 1.4508 1.4749 1.4892 1.5036 1.5181	8.85506 + 0 8.94059 9.02694 9.11414 9.20217 9.38080 9.47141 9.56289 9.65526	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
63000 63200 63400 63600 63800 64000 64200 64400 64800	63191 63392 63593 63795 63796 64197 64398 64600 64801 65002	968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1, 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.5328 - 3 1.5476 1.5625 1.5776 1.5928 1.6082 1.6238 1.6395 1.6353 1.6713	9.74852 + 0 9.84268 9.93775 1.00337 + 1 1.01307 1.02265 1.03273 1.04271 1.05278	3-1325 - 6 3-1325 3-1325 3-1325 3-1325 3-1325 3-1325 3-1325 3-1325 3-1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
65000 65200 65400 65600 65600 66000 66200 66400 66600 66800	65203 65404 65606 65807 6608 66210 65411 66612 66813 67015	968.08 968.08 968.08 968.08 968.20 969.34 968.47 968.47 968.61	9.5528 - 6 9.5528 9.5528 9.5528 9.5549 9.5571 9.5594 9.5616 9.5639 9.5661	7.94472 - 1 7.94472 7.94472 7.94472 7.94644 7.94631 7.95018 7.95205 7.95393 7.95580	1.6874 - 3 1.7037 1.7202 1.7368 1.7548 1.7722 1.7903 1.8065 1.8269 1.8455	1.07321 + 1 1.08358 1.09405 1.10461 1.11581 1.12717 1.13863 1.15022 1.16191	3-1325 - 6 3-1325 3-1325 3-1325 3-1333 3-1341 3-1358 3-1366 3-1374	7.70146 - 1 7.70146 7.70146 7.70146 7.70332 7.70534 7.70737 7.70740 7.71143 7.71345
67000 67200 67400 67600 67600 68000 68200 68400 68600 68800	67216 67417 67619 67820 68021 68222 68424 68625 68826 69028	969.02 969.15 969.29 969.43 969.56 969.70 969.83 969.97 970.10 970.24	9.5684 - 6 9.5706 9.5729 9.5771 9.5774 9.5796 9.5819 9.5841 9.5863 9.58863	7.95767 - 1 7.95954 7.96141 7.96328 7.96515 7.96702 7.96889 7.97076 7.97263 7.97450	1.8642 - 3 1.8831 1.9023 1.9216 1.9411 1.9608 1.9807 2.0008 2.0211 2.0415	1.18565 + 1 1.19770 1.20986 1.22215 1.23455 1.23455 1.24708 1.25973 1.27251 1.28581 1.29884	3.1382 - 6 3.1391 3.1399 3.1407 3.1415 3.1424 3.1432 3.1440 3.1448 3.1456	7.71548 - 1 7.71751 7.71953 7.72156 7.72358 7.72561 7.72764 7.72966 7.73169 7.73371
69000 69200 69400 69800 70000 70200 70400 70800	69229 69430 69632 69833 70034 70236 70437 70638 70840 71041	970.38. 970.51 970.65 970.78 970.92 971.06 971.19 971.33 971.46 971.60	9.5908 - 6 9.5931 9.5953 9.5976 9.5978 9.6021 9.6043 9.6066 9.6088 9.6111	7.97636 - 1 7.97623 7.98010 7.98197 7.98354 7.985570 7.98757 7.98944 7.99317	2.0622 - 3 2.0831 1042 2.1255 2.1255 2.1471 2.1471 2.1907 2.2129 2.2352 2.2578	1.31160 + 1 1.32489 1.33831 1.35186 1.36554 1.37936 1.37936 1.40741 1.42164 1.43601	3.1465 - 6 3.1473 3.1481 3.1489 3.1498 3.1506 3.1514 3.1522 3.1531 3.1531	7.73574 - 1 7.73979 7.73979 7.74182 7.74384 7.74587 7.74789 7.74587 7.75194
71000 71200 71400 71600 71800 72000 72200 72400 72600 72800	71243 71444 71645 71847 72048 72249 72451 72652 72854 73055	971.73 971.87 972.01 972.14 972.28 972.41 972.55 972.68 972.82 972.95	9.6133 - 6 9.6155 9.6178 9.6200 9.6223 9.6245 9.6245 9.6290 9.6312 9.6335	7.99504 - 1 1 7.99690 7.99877 8.00064 8.00250 6.00437 8.00623 8.00810 8.00996 8.01183	2.2807 - 3 2.3037 2.3270 2.3505 2.3742 2.3781 2.4223 2.4468 2.4714 2.4963	1.45052 + 1 1.46517 1.47997 1.47491 1.51000 1.52524 1.54063 1.55616 1.57185 1.58770	3.1547 - 6 3.1555 3.1564 3.1572 3.1588 3.1588 3.1596 3.1605 3.1613 3.1621	7.75599 - 1 7.75801 7.76004 7.76206 7.76409 7.76611; 7.76813 7.77216 7.77218 7.77420
73000 73200 73400 73600 73600 74000 74200 74400 74600 74800	73256 73458 73659 73661 74062 74264 74465 74666 74868 75069	973.09 973.23 973.36 973.50 973.63 973.77 973.90 974.04 974.31	9.6357 - 6 9.6380 9.6402 9.6424 9.6447 9.6469 9.6492 9.65514 9.6536	8.01369 - 1 8.01355 6.01742 8.017928 8.02114 8.0221301 8.02487 8.02673 8.02659 8.03046	2.5215 - 3 2.5469 2.5726 2.5985 2.6246 2.6510 2.6777 2.7046 2.7318 2.7593	1.60370 + 1 1.61985 1.63617 1.65264 1.66927 1.68807 1.70303 1.72016 1.73746	3.1629 6 3.1636 3.1646 3.1655 3.1662 3.1671 3.1679 3.1695 3.1703	7.77623 - 1 7.77825 7.78027 7.78230 7.78432 7.78634 7.78636 7.79039 7.79241 7.79443
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TABLE VI.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altitude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal o	onductivity
Z, ft H,	ft C _s ,	μ , lb ft $^{-1}$ sec $^{-1}$	$\frac{\mu}{\mu_0}$	η, ft² sec⁻¹	$\frac{\eta}{\eta_0}$	k, BTŲ ff ^{-l} sec ^{-l} (OR) ^{-l}	<u>k</u> k _o
59200 59 59400 59 59600 59 60000 59 60200 60 60400 60	334 968.08 032 968.08 231 968.08 430 968.08 429 968.08 628 968.08 027 968.08 027 968.08 026 968.08 027 968.08 028 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.25%6 - 3 1.2667 1.2788 1.2911 1.3035 1.3140 1.3287 1.34% 1.35%3 1.3673	7-97938 + 0 8-05602 6-13339 8-21150 8-29036 8-3998 8-45036 8-53151 8-61344 8-69615	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 - 1 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
61200 61 61400 61 61600 61 61800 61 62000 61 62200 62 62400 62	822 968.08 908.08 908.08 908.08 117 968.08 117 968.08 116 968.08 908.08 948.08 112 948.08 948.08 948.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.3804 - 3 1.3937 1.4071 1.4226 1.4342 1.4480 1.4619 1.4759 1.4759 1.4901	8.77966 + 0 8.86396 8.94908 9.03501 9.12176 9.20934 9.29777 9.38704 9.47716 9.56815	3.1325 - 6. 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6 7.701%6
63200 63 63400 63 63600 63 64000 63 64200 64 64400 64	810 968.08 009 968.08 407 968.08 407 968.08 605 968.08 968.08 968.08 968.08 968.08 968.08 968.08 968.08	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528 9.5528	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472 7.94472	1.5188 - 3 1.5334 1.5582 1.5630 1.5780 1.5782 1.6085 1.6239 1.6239 1.6552	9.66001 + 0 9.75276 9.84639 9.94091 1.00363 + 1 1.01327 1.02300 1.03282 1.04273 1.05274	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325 3.1325	7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146 7.70146
65200 65 65400 65 65600 65 65800 65 66000 65 66200 65 66400 66	798 968.08 997 968.08 196 968.08 593 968.08 593 968.09 792 968.19 991 968.33 189 968.47 388 968.74	9.5528 - 6 9.5528 9.5528 9.5528 9.5528 9.5528 9.5548 9.5570 9.5570 9.5615 9.5615	7.94472 - 1 7.94472 7.94472 7.94472 7.94472 7.94473 7.94636 7.94822 7.95008 7.95194 7.95380	1.6711 - 3 1.6872 	1.06285 + 1 1.07305 1.08335 1.09375 1.10424 1.11534 1.12662 1.13801 1.14951	3.1325 - 6 3.1325 3.1325 3.1325 3.1325 3.1333 3.1341 3.1349 3.1357 3.1365	7.70146 7.70146 7.70146 7.70146 7.70146 7.70323 7.70525 7.70726 7.70928 7.71129
67200 66 67400 67 67600 67 68000 67 68200 67 68400 68	785 968.87 984 969.01 183 969.14 382 969.28 580 969.41 779 969.55 978 969.68 176 969.82 375 969.95 574 970.09	9.5659 - 6 9.5682 9.5704 9.5727 9.5749 9.5771 9.5794 9.5816 9.5838 9.5861	7.95566 - 1 7.95752 7.95938 7.96124 7.96309 7.96495 7.96681 7.96867 7.97052 7.97238	1.8441 - 3 1.8627 1.8815 1.9005 1.9197 1.9390 1.9586 1.9783 1.9983 2.0184	1.17286 + 1 1.18470 1.19666 1.20873 1.22093 1.23324 1.24568 1.25823 1.27091 1.28371	3.1373 - 6. 3.1390 3.1390 3.1398 3.1408 3.1414 3.1423 3.1431 3.1439 3.1447	7.71330 7.71532 7.71733 7.71793 7.71935 7.72136 7.72337 7.72538 7.72740 7.72740 7.72941 7.73142
69200 68 69400 69 69800 69 70000 69 70200 69 70400 70	772 970.22 971 970.36 170 970.49 368 970.63 567 970.76 970.90 965 971.03 163 971.17 362 971.37 560 971.44	9.5883 - 6 9.5905 9.5927 9.5950 9.5972 9.5994 9.6017 9.6039 9.6061 9.6084	7.97424 - 1 7.97609 7.97795 7.977981 7.98166 7.98352 7.98537 7.98723 7.98908 7.99994	2.0387 - 3 2.0592 2.0800 2.1009 2.1220 2.1434 2.3649 2.1867 2.2086 2.2308	1.29664 + 1 1.30969 1.32287 1.33518 1.34962 1.36319 1.37690 1.39073 1.40470	3.1455 - 6 3.1464 3.1472 3.1480 3.1488 3.1496 3.1504 3.1513 3.1521 3.1521	7.73344 7.73545 7.73746 7.73747 7.74148 7.74349 7.74551 7.74752 7.74953 7.75154
71200 70 71400 71 71800 71 72000 71 72200 71 72400 72	759 971.57 156 971.71 156 971.84 355 971.98 554 972.11 752 972.24 1951 972.38 150 972.51 348 972.65	9.6106 - 6 9.6128 9.6151 9.6173 9.6195 9.6217 9.6240 9.6262 9.6262 9.6306	7.99279 - 1 7.99464 7.99650 7.99835 8.00020 8.00206 8.00391 8.00576 8.00761	2.2532 - 3 2.2758 2.2987 2.3217 2.3450 2.3685 2.3922 2.4162 2.4162 2.4648	1.43306 + 1 1.44744 1.46196 1.47663 1.49144 1.50639 1.52148 1.53673 1.55212 1.56766	3.1537 - 6 3.1545 3.1554 3.1552 3.1570 3.1578 3.1578 3.1586 3.1594 3.1603 3.1611	7.75355 7.75556 7.75557 7.75558 7.76159 7.76360 7.76561 7.76561 7.7662 7.76963 7.77164
73000 72 73200 72 73400 73 73600 73 74000 73 74200 74	745 972.92 944 973.05 91341 973.39 9341 973.46 1738 973.59 1937 973.72 1335 973.50 1334 973.99 1533 974.13	9.6329 - 6 9.6351 9.6373 9.6395 9.6418 9.6440 9.6462 9.6464 9.6507 9.6529	8.01132 - 1 8.01317 8.01502 8.01687 8.01872 8.02057 8.02242 8.02242 8.02427 8.02612 8.02797	2.4895 - 3 2.5144 2.5396 2.5650 2.5650 2.5906 2.6165 2.6427 2.6691 2.6957 2.7226	1.58335 + 1 1.59920 1.61519 1.63135 1.64766 1.6676 1.69754 1.71450 1.73161	3.1619 6 3.1627 3.1635 3.1643 3.1652 3.1660 3.1668 3.1676 3.1684 3.1692	7.77365 - 7.77566 7.77767 7.77968 7.78369 7.78370 7.78570 7.78971 7.78972 7.79173

TABLE 37 — Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

5271 974.44 5472 974.56 5474 974.72 5875 974.85 6474 975.72 6475 974.87 975.26 6477 975.26 6477 975.26 6481 975.39 6482 975.53 975.80 975.80 975.80 975.80 976.80 976.97 976.97 976.97 976.97 976.97 976.97 976.97 977.98 977.82 977.82 977.82 977.83 976.81 977.82 977.82 977.83	## 1	### ### ### ### ### ### ### ### ### ##	7, ff2 Sec- 2.7870 - 3 2.8150 2.8150 2.8453 2.8718 2.9066 2.9297 2.9591 2.9882 3.0198 3.0490 3.0796 - 3 3.1104 3.1416 3.1730 3.2018 3.2018 3.208 3.2365 3.3663 3.4019 - 3 3.4359 3.3683 3.4019 - 3 3.4359 3.5752 3.5049 3.5399 3.5752 3.6109 3.6469 3.6832 3.7179 3.7570 - 3 3.7944 3.8322	77 70 70 70 1.77255 + 1 1.77036 1.8083h 1.82650 1.8483 1.8633h 1.8091 1.91997 1.93921 1.97826 1.97826 1.97826 1.97826 1.97826 1.97826 2.03828 2.12106 2.1226 2.12106 2.1226 2.13926 2.291h 2.28538 2.31984 2.34256 2.36591	K, BTUITI'sec (OR)' 3.1742 - 6 3.1720 3.1728 3.1735 3.1753 3.1753 3.1753 3.1754 3.1777 3.1786 3.1777 3.1802 3.1810 3.1819 3.1827 3.1823 3.1851 3.1851 3.1868 3.1868 3.1876 - 6 3.1893 3.1893 3.1993 3.1993 3.1993 3.1994 3.1994 3.1995 3.1934 3.1958 - 6 3.1958 - 6	7.79445 - 1 7.79848 7.80050 7.80252 7.80454 7.00556 7.80252 7.81041 7.81263 7.81465 7.81869 7.82071 7.82879 7.82475 7.82677 7.82677 7.82677 7.82677 7.82677 7.83686 7.83485 7.83485 7.83485 7.83485 7.83487 7.83687 7.83687 7.83687 7.83687 7.83687 7.83689 7.84997 7.85101 7.85505
5472 974.58 5674 974.72 5674 974.72 5675 974.85 6077 974.99 6278 975.12 64681 975.26 64681 975.39 975.26 64681 975.53 975.66 7285 975.80 975.67 7880 976.07 7880 976.07 7880 976.07 7880 976.07 7890 976.20 8091 976.34 8293 976.47 84096 977.01 978.63 977.01 978.70 977.28 977.28 977.28 977.28 977.28 977.28 977.28	9.6604 9.6646 9.6647 9.6647 9.6715 9.6715 9.6738 9.6760 9.6783 9.6760 9.6827 9.6827 9.6850 9.6872 9.6894 9.70917 9.6939 9.7091 9.7098 9.7091 9.7098 9.7118 9.7709 9.7274 9.7274 9.7296 9.7319 9.7341 9.7341 9.7341	8.03404 6.03770 8.03976 8.04349 8.04349 8.04535 8.04721 8.04907 8.055093 - 1 8.055093 - 1 8.05500 8.05500 8.05500 8.05500 8.05500 8.05304 8.06394 8.06394 8.06394 8.06765 8.06765 8.06765 8.06765 8.06765 8.07894 8.07894 8.07897 8.07898 8.07894 8.07897 8.08065 8.08062	2.8150 2.8433 2.8718 2.9006 2.9297 2.9591 2.9882 3.0188 3.0198 3.0198 3.1104 3.1116 3.1116 3.11730 3.2018 3.236 3.236 3.350 3.3550 3.3683 3.4019 - 3 3.4359 3.4702 3.5049 3.5359 3.4702 3.5049 3.5359 3.4702 3.5049 3.5770 - 3 3.7944	1.80634 1.8250 1.8483 1.86334 1.86334 1.86334 1.90991 1.91997 1.93921 1.97824 1.97824 1.97826 1.97828 2.01808	3.1794 - 6 3.1802 - 5 3.1802 - 6 3.1819 3.1827 3.1635 3.1843 3.1851 3.1860 3.1866 3.1876 - 6 3.1825 3.1893 3.1901 3.1909 3.1917 3.1925 3.1934 3.1942 3.1950 3.1958 - 6	7.80050 7.80252 7.80454 7.80456 7.80456 7.81867 7.81867 7.81867 7.81869 7.82071 7.82475 7.82475 7.82475 7.82475 7.82879 7.83081 7.83081 7.83081 7.83081 7.8499 7.8499 7.8499 7.85101 7.85505
7487 975.93 7688 976.07 7890 976.20 976.20 976.20 976.20 976.34 8293 976.47 8499 976.74 98999 977.01 9300 977.15 9300 977.15 9300 977.28 977.28 977.28 977.28 977.28 977.28 977.82 977.82 977.82 977.82 977.82 977.82 978.93	9.6827 9.6850 9.6872 9.6894 9.6937 9.6931 9.6961 9.7051 9.7051 9.7073 9.7073 9.7118 9.71185 9.7140 9.7162 9.7227 9.7227 9.7227 9.7231 9.7341 9.7341 9.7341	8.05278 8.05464 8.05650 8.05650 8.05836 8.06022 8.06208 8.06374 8.06577 8.06765 8.07137 8.07322 8.07322 8.07594 8.07597 8.07694 8.07694 8.07694 8.07694 8.07694 8.07694 8.07694 8.07694 8.07694 8.07694 8.07694 8.07694 8.07694	3.1104. 3.1730 3.2048 3.236 3.236 3.236 3.236 3.3019 3.3350 3.4019 - 3 3.4359 3.4702 3.5702 3.6469 3.632 3.7199	1.97826 1.97808 2.01808 2.01808 2.03828 2.05867 2.1006 2.12106 2.1226 2.16366 + 1 2.18528 2.20710 2.22914 2.25139 2.27385 2.3054 2.3054 2.30591	3-1802 3-1810 3-1819 3-1827 3-1835 3-1843 3-1851 3-1860 3-1868 3-1876 - 6 3-1825 3-1901 3-1901 3-1907 3-1917 3-1925 3-1942 3-1950 3-1950	7.81867 7.82071 7.82273 7.82477 7.82677 7.82677 7.83081 7.83283 7.83885 7.83885 7.83889 7.84091 7.84293 7.84997 7.84697 7.84899 7.85101 7.85303 7.85505
10107 977.82 5510 977.82 5510 977.96 5711 978.09 5913 978.23 1111 978.50 1516 978.50 1517 978.63 1719 978.76 1921 978.76 1921 979.03 2324 979.17	9.7051 9.7073 9.7095 9.7118 9.7160 9.7162 9.7165 9.7207 9.7229 9.7274 9.7276 9.7319 9.73119	8.07137 8.07302 8.07508 8.07694 8.07879 8.08065 8.08251 8.08251 8.08836 8.08622 8.08807 ~ 1 8.08993 8.09178	3.4559 3.4702 3.5049 3.5399 3.5752 3.6109 3.6852 3.7199 3.7570 — 3	2.18528 2.20710 2.22914 2.25139 2.27385 2.29654 2.31944 2.31945 2.36591	3.1025; 3.1693; 3.1901; 3.1907; 3.1917; 3.1925; 3.1934; 3.1942; 3.1950;	7.83889 7.84091 7.84293 7.84495 7.84497 7.84699 7.85101 7.85303 7.85505
1719 978.76 1921 978.90 2122 979.03 2324 979.17	9.7274 9.7296 9.7319 9.7341 9.7363	8.08993 8.09178 8.0936h	3.7944	2.38949 + 1 2.41329	3-1958 - 6	7.85706 - 1
2727 979.44 2928 979.57 3130 979.71	9.7385 9.7408 9.7430 9.7452	8.095%9 8.09734 8.09920 8.10105 8.10291 8.10476	3.8704 3.9089 3.9478 3.9871 4.0267 4.0668 4.1072	2.45735 2.46159 2.48610 2.51083 2.53581 2.56103 2.58649 2.61220	3.1975 3.1983 3.1991 3.1999 3.2007 3.2016 3.2024 3.2032	7.85706 - 1 7.85708 - 1 7.86110 7.86312 7.86514 7.86716 7.86917 7.67119 7.87321 7.87523
3332 979.84 3533 979.98 3735 980.11 3937 980.25 4138 980.38 4340 980.51 4541 980.65 4743 980.78 4945 981.05	9.7475 - 6 9.7497 9.7519 9.7581 9.7584 9.7608 9.7608 9.7653 9.7675	8.10661 - 1 8.10846 8.11032 8.11217 8.11402 8.11587 8.11773 8.11773 8.12143 8.12328	4.1480 - 3 4.1892 4.2308 4.2728 4.3152 4.3580 4.4013 4.4449 4.5335	2.63816 + 1 2.66437 2.69083 2.71754 2.71452 2.77175 2.79925 2.82701 2.85504 2.88334	3.2040 - 6 3.2048 3.2055 3.2065 3.2073 3.2081 3.2090 3.2098 3.2106 3.2114	7.87724 - 1 7.87926 7.88128 7.88330 7.88531 7.88733 7.88935 7.89136 7.89338 7.89540
5348 981.19 5550 981.32 5751 981.46 5953 981.59 6154 981.72 6356 981.72 6356 981.98 6759 982.13 6961 982.26 7163 982.40	9.7697 - 6 9.7719 9.7742 9.7764 9.7808 9.7831 9.7853 9.7875 9.7877	8.12513 - 1 8.12698 8.12883 8.13868 8.13253 8.13438 8.13623 8.13808 8.13993 8.14178	4.5784 - 3 4.6238 4.6696 4.7158 4.7625 4.8096 4.8572 4.9052 4.9537 5.0027	2.91191 + 1 2.94076 2.94078 2.99988 2.99929 3.02897 3.05895 3.08921 3.11976 3.15061 3.18175	3.2122 - 6 3.2131 3.2139 3.2147 3.2155 3.2163 3.2172 3.2180 3.2168 3.2168	7.89741 - 1 7.89943 7.90145 7.90346 7.90548 7.90749 7.90951 7.91153 7.91354 7.91556
7364 982.53 7566 982.66 7768 982.80 7970 982.93 8171 983.07 8373 983.20 8575 983.33 8776 983.47 8978 983.60 9180 983.74	9.7920 - 6 9.7942 9.7964 9.7986 9.8008 9.8031 9.8053 9.8075 9.8077	8.14363 - 1 8.14547 8.14732 8.14917 8.15102 8.15287 8.15471 8.15656 8.15841 8.16025	5.0521 - 3 (5.1020 5.1524 5.2033 5.2547 5.3065 5.3589 5.4117 5.4651 5.5190	3.21319 + 1 3.24894 3.27699 3.30934 3.34201 3.37899 3.40829 3.41790 3.47584 3.51010	3.2204 - 6 3.2213 3.2221 3.2229 3.2237 3.2245 3.2253 3.2262 3.2270 3.2278	7.91757 - 1 7.91959 7.92160 7.92362 7.92563 7.92765 7.92766 7.93168 7.93369 7.93570
9381 983.87 9583 984.00 9785 984.14 9987 984.41 0390 984.57 0390 984.67 0794 984.81 0995 984.08	9.8142 - 6. 9.8164 9.8208 9.8223 9.8253 9.8275 9.8277 9.8319 9.8341	8.16210 - 1 8.16395 8.16579 8.16764 8.16948 8.17133 8.17317 8.17502 8.17686 8.17871	5.5733 - 3 5.6283 5.6837 5.7397 5.7397 5.8532 5.8532 5.9108 5.9689 6.0276 6.0869	3.54469 + 1 3.57962 3.61487 3.65647 3.68640 3.72268 3.75931 3.79628 3.83361 3.87130	3.2286 - 6 3.2294 3.2303 3.2311 3.2319 3.2327 3.2335 3.2344 3.2352 3.2360	7.93772 - 1 7.93973 7.94375 7.94376 7.94577 7.94779 7.94980 7.95181 7.95383 7.95584
4451555566666677 7777788888889 9:99999000000000000000000000000	388 980.38 1840 90.51 980.51 980.58 1841 980.78 981.95 981.05 981.32 981.55 981.55 981.55 981.55 981.55 982.26 982.80 982.80 982.80 982.80 982.80 982.80 982.80 983.77 983.60 983.78 185 983.60 983.78 185 983.60 983.78 185 983.60 983.78 185 983.60 983.78 185 983.60 983.78 185 983.60 983.79 185 983.60 983.6	138	138 980,38 9.7564 8.11402	\$\frac{1}{181} \text{980.65} \text{9-7-608} \text{8.11773} \text{8.4013} \text{8.11773} \text{8.4013} \text{8.11758} \text{8.4013} \text{8.4000} \text{980.92} \text{9-7-653} \text{8.12133} \text{8.5335} \text{8.5335} \text{8.15328} \text{8.5335} \text{8.15328} \text{8.5335} \text{981.40} \text{9.7719} \text{8.12883} \text{8.46238} \text{8.46238} \text{8.46238} \text{8.46238} \text{8.46238} \text{8.4696} \text{9.1784} \text{8.13253} \text{8.47625} \text{981.85} \text{9.1786} \text{8.13253} \text{8.696} \text{8.7158} \text{8.696} \text{8.13253} \text{8.696} \text{8.72} \text{9.13253} \text{8.696} \text{8.13253} \text{8.696} \text{8.13253} \text{8.696} \text{8.13253} \text{8.6972} \text{8.13438} \text{8.696} \text{8.1599} \text{8.13253} \text{8.6972} \text{8.13438} \text{8.696} \text{8.6972} \text{8.14732} \text{8.572} \text{9.8213} \text{9.7875} \text{8.13993} \text{4.9537} \text{9.537} \text{9.82.60} \text{9.7942} \text{8.14732} \text{5.1524} \text{9.82.70} \text{9.82.93} \text{9.8313} \text{8.14732} \text{5.1524} \text{9.8373} \text{9.8031} \text{8.15871} \text{5.3589} \text{9.8031} \text{8.15871} \text{5.3589} \text{9.8140} \text{8.16210} \text{5.5733} \text{8.837} \text{8.83} \text{8.16210} \text{5.7397} \text{8.83} \text{8.16210} \	\$\frac{1}{141} \text{930.65} \text{9.7608} \text{8.11773} \text{8.4013} \text{2.62701} \\ \text{143} \text{980.78} \text{9.7630} \text{8.11956} \text{8.44890} \text{2.68504} \\ \text{146} \text{981.05} \text{9.7675} \text{8.12328} \text{8.5335} \text{2.88334} \\ \text{148} \text{981.05} \text{9.7719} \text{8.12698} \text{8.5335} \text{2.94076} \\ \text{550} \text{981.32} \text{9.7742} \qq \qq \qq \qq \qq\qq\q	\$\frac{1}{141} \text{940.65} \text{9.7608} \text{8.11773} \text{8.11758} \text{8.4490} \text{2.82701} \text{3.2208} \text{3.2208} \text{3.2208} \text{3.2208} \text{3.2208} \text{3.2209} \t

TABLE IX.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Alti	tude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal o	conductivity
Z, ft	H, ft	C _s , ft sec	$\widehat{\mu}$, lb ft $^{-1}$ sec $^{-1}$	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k., BTU ff ⁼¹ sec ⁻¹ (°R) ⁼¹	k k _O ,
75000 75200 75400 75400 75400 76000 76400 76400 76600	74731 74930 75128 75327 75525 75724 75923 76121 76320 76518	974.26 974.40 974.53 974.67 974.80 974.93 975.07 975.20 975.34	9.6551 - 6 9.6573 9.6576 9.6640 9.6640 9.6662 9.6684 9.6707 9.6729	8.02982 - 1 8.03166 8.0351 8.03536 8.03721 8.03796 8.04090 8.04090 8.04275 8.04460 0.04644	2.7498 - 3 2.7724 2.8704 2.8329 2.8617 2.8897 2.9184 2.9475 2.9769 3.0065	1.74889 * 1 1.76634 1.76396 1.80175 1.81971 1.83784 1.85615 1.87464 1.89330 1.91215	3.1701	7.79374 - 1 7.79574 7.79775 7.79976 7.80177 7.80377 7.80578 7.80779 7.80979 7.81180
77000 77200 77400 77600 77800 78000 78200 78400 78400 78800	76717 76915 77114 77312 77511 77509 77708 78106 78305 78503	975.61 975.74 975.87 976.01 976.14 976.28 976.41 976.54 976.68	9.6773 - 6 9.6795 9.6818 9.6840 9.6862 9.6884 9.6906 9.6929 9.6951 9.6973	8.04829 - 1 8.05014 8.05198 8.05383 8.05567 8.055752 2.05936 8.06121 8.06305 8.06490	3.0364 - 3 3.0666 3.0971 3.1279 3.1590 3.1904 3.2220 3.2540 3.2863 3.3190	1.93117 + 1 1.95038 1.96978 1.98936 2.00913 2.02910 2.04925 2.06960 2.09014 2.11089	3.1782 - 6 3.1790 3.1799 3.1807 3.1815 3.1823 3.1831 3.1839 3.1848 3.1856	7.81381 - 1 7.81581 7.81792 7.81782 7.82183 7.82384 7.82584 7.82785 7.82785 7.82985
79000 79200 79400 79600 79800 80000 80200 80400 80400 80800	78702 78900 79099 79297 79496 79694 79893 80091 80290 80488	976.95 977.08 977.21 977.35 977.48 977.62 977.75 977.88 978.02 978.15	9.6995 - 6 9.7017 9.7039 9.7062 9.7084 9.7106 9.7128 9.7129 9.7172	8.06674 - 1 8.06858 8.07043 8.07227 8.07596 8.07596 8.07780 8.07964 8.08188 8.08332	3.3519 - 3 3.3851 3.4187 3.4526 3.4868 3.5213 3.5562 3.5914 3.6270 3.6628	2.13183 ÷ 1 2.15297 2.17432 2.19587 2.21763 2.23960 2.26178 2.28417 2.30678 2.32960	3.1864 - 6 3.1872 3.1880 3.1888 3.1896 3.1905 3.1913 3.1921 3.1929 3.1937	7.83386 - 1 7.83587 7.83787 7.83987 7.84388 7.84388 7.84589 7.84789 7.84789 7.85190
81000 81200 81400 81600 81600 82000 82200 82400 82400 82800	80687 80885 81083 81282 81480 81679 81677 82076 82274 82473	978.28 978.42 978.55 978.69 978.82 978.95 979.09 979.22 979.35 979.49	9.7217 - 6 9.7239 9.7261 9.7263 9.7305 9.7327 9.7327 9.7349 9.7372 9.7394 9.7416	8.08516 - 1 8.08701 8.08885 8.09049 8.09253 8.09437 8.09421 8.09605 8.09989 8.10172	3.6991 - 3 3.7357 3.7726 3.8099 3.8855 3.8855 3.9239 3.9626 4.0017 4.0412	2.35265 + 1 2.37591 2.379940 2.42311 2.44705 2.47122 2.49562 2.52026 2.54513 2.57024	3.1945 - 6 3.1953 3.1952 3.1970 3.1978 3.1986 3.1986 3.1994 3.2002 3.2011 3.2019	7.85390 - 1 7.85590 7.85791 7.85991 7.86191 7.86392 7.86592 7.86792 7.86992 7.87192
83000 83200 83400 83600 84000 84200 84400 84600 84800	82671 82859 83068 83266 83465 83663 83861 84060 84258 84457	979-62 979-75 979-89 980-02 980-15 980-29 980-42 980-55 980-69 980-82	9.7438 - 6 9.7462 9.7482 9.7504 9.7526 9.7548 9.7570 9.7593 9.7615 9.7637	8.10356 - 1 8.10550 8.10724 8.10908 8.11092 8.11275 8.11459 8.11459 8.11643 8.11626 8.12010	4.0811 - 3 4.1213 4.1619 4.2029 4.2443 4.2861 4.3283 4.3709 4.4139 4.4573	2.59558 + 1 2.62117 2.64701 2.64709 2.69943 2.72601 2.75285 2.77994 2.80729 2.83491	3.2027 - 6 3.2035 3.2043 3.2051 3.2057 3.2067 3.2076 3.2084 3.2092 3.2100	7.87393 - 1 7.87593 7.87793 7.87793 7.88193 7.88393 7.88593 7.88793 7.88993 7.89193
85000 85200 85400 85600 85800 86200 86200 86400 86400 86800	84655 84853 85052 85250 85448 85647 85845 86043 86242 86440	980.95 981.09 981.22 981.35 981.49 981.62 981.75 981.89 982.02 982.15	9.7659 - 6 9.7681 9.7703 9.7725 9.7725 9.7747 9.7769 9.7791 9.77813 9.7835 9.7835	8.12194 - 1 8.12377 8.12561 8.12744 8.12928 8.13111 8.13295 8.13478 8.13662 8.13845	4.5012 - 3 4.5454 4.5901 4.6352 4.6807 4.7267 4.7731 4.8199 4.8672 4.9149	2.86278 + 1 2.89093 2.91934 2.94802 2.97697 3.00620 3.0357! 3.06550 3.09558 3.12594	3.2108 - 6 3.2116 3.2124 3.2133 3.2141 3.2149 3.2157 3.2165 3.2163	7.89394 - 1 7.8959h 7.8959h 7.89793 7.8999h 7.90193 7.90393 7.90593 7.90793 7.90993 7.91193
87000 87200 87400 87600 87800 88200 88200 88400 88600 88600	86637 86837 87035 87234 87432 87630 87829 88027 88225 88423	982.29 982.42 982.55 982.69 982.82 982.95 983.09 983.22 983.35 983.48	9.7879 - 6 9.7901 9.7924 9.7946 9.7968 9.7990 9.8012 9.8034 9.8056 9.8078	8.14028 - 1 8.14212 8.14395 8.14578 8.14762 8.14762 8.15128 8.15311 8.15311 8.155494 8.15678	4.9631 - 3 5.0118 5.0609 5.1105 5.1605 5.2110 5.2620 5.3135 5.3655 5.4180	3.15659 + 1 3.18753 3.21876 3.25029 3.28212 3.31426 3.34669 3.37944 3.41250 3.44586	3.2189 - 6 3.2198 3.2214 3.2214 3.2222 3.2230 3.2238 3.2238 3.2255 3.2263	7.91393 - 1 7.91593 7.91793 7.91992 7.92192 7.92392 7.92592 7.92592 7.92792 7.92791 7.93191
89000 89200 89400 89600 90000 90200 90400 90800	88622 88820 89018 89217 89415 89413 89812 90010 90208 90406	983.62 983.75 983.88 984.02 984.15 984.28 984.41 984.55 984.68	9.8100 - 6 9.8122 9.8144 9.8166 9.8188 9.8210 9.8232 9.8254 9.8254 9.8276	8.15861 - 1 8.16044 8.16227 8.16410 8.16593 8.16776 8.16959 8.17142 8.17325 8.17508	5.4709 - 3 5.5784 5.5784 5.6528 5.6878 5.7434 5.7994 5.8560 5.9131 5.9708	3.47955 + 1 3.51356 3.54789 3.58254 3.61752 3.65283 3.68848 3.72446 3.76079 3.79746	3.2271 - 6 3.2279 3.2295 3.2295 3.2395 3.2311 3.2319 3.2328 3.2336 3.2336	7.93391 - 1 7.93591 7.93790 7.93990 7.94190 7.94389 7.94589 7.94789 7.94988 7.95188
			gg fu					•

TABLE VI.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

► Altii	lude	Sound speed	.	of viscosity			Thermal c	onductivity
н, т	2, ft	© _s , ft sec ^{-t}	μ , lb fi ⁻¹ sec ⁻¹	$\frac{\mu}{\mu_0}$	η , fix sec-1	$\frac{\eta}{\eta_0}$	k, BTUff ⁻¹ sec ⁻¹ (98) ⁻¹	k ko
91000 91200 91400 91600 91600 9200 92200 92400 92600 92800	91399 91601 91802 92004 92204 92408 92408 92609 92811 93013 93215	935.21 985.34 985.48 985.61 985.74 985.88 986.01 986.15 986.28	9.8364 - 6 9.8386 9.0408 9.0430 9.9452 9.8474 9.8497 9.8519 9.8561 9.8563	8.18055 - 1 8.18240 8.18424 8.18608 8.18977 8.19161 6.19345 8.19530 8.19714	6.1467 - 3 6.2071 6.2680 6.3296 6.3917 6.4555 6.5178 6.5817 6.6463 6.7114	3.90934 + 1 3.94775 3.98653 4.02567 4.00519 4.10509 4.18603 4.18603 4.22708 4.26552	3.2368 - 6 3.2376 3.2395 3.2393 3.2409 3.2417 3.2417 3.2453 3.2452	7.95785 - 1 7.95987 7.96188 7.96389 7.96590 7.96792 7.96993 7.97194 7.97395 7.97596
93000 93200 93400 93600 93600 94000 94200 94400 94600 94800	93417 93618 93820 94022 94224 94226 94627 94627 94829 95031 95233	986.55 986.68 986.81 986.95 987.21 987.21 987.35 987.48 987.62 987.75	9.8585 - 6 9.8607 9.8652 9.8652 9.8674 9.8718 9.8740 9.8740 9.8762 9.8784	8.19898 - 1 8.20082 8.20266 8.20451 8.20455 8.20819 8.21003 8.21187 8.21371 8.21555	6.7772 - 3 6.8436 6.9106 6.9783 7.0466 7.1156 7.1852 7.2555 7.3264 7.3981	4.31035 + 1 4.35258 93522 4.43820 4.48171 4.52557 4.56985 4.61456 4.65968 4.70524	3.2450 - 6 3.2458 3.2466 3.2475 3.2497 3.2497 3.2499 3.2507 3.2515 3.2524	7.97798 - 1. 7.97999 7.98200 7.98602 7.98602 7.98602 7.99004 7.99206 7.99407 7.99408
95000 95200 95400 95400 95800 96200 96400 96400 96800	95435 95637 95838 96040 96242 96444 96646 96848 97050 97251	987.88 988.02 988.15 988.28 988.42 988.55 988.68 988.82 988.95 989.08	9.8807 - 6 9.88251 9.8853 9.8873 9.8895 9.8917 9.8939 9.8961 9.8983 9.9006	8.21739 - 1 8.21923 8.22107 8.22291 8.22475 8.22459 6.22842 8.23210 8.23210	7.4704 - 3 7.5434 7.6171 7.6915 7.7665 7.7665 7.8424 7.9189 7.9961 8.0741 8.0741	4.75123 + 1 4.79765 4.8452 4.89183 4.93959 4.98781 5.03648 5.03648 5.03561 5.13521 5.18527	3.2532 - 6 3.2548 3.2556 3.2555 3.2573 3.2589 3.2597 3.2597	7.99809 - 1 - 8.00010 8.00211 8.00211 8.00613 8.00613 8.00814 8.01015 8.01216 8.01417 8.01618
97000 97200 97400 97600 97600 98000 98200 98400 98600 98800	97453 97655 97857 98057 98261 98463 98665 98867 99068 99270	989.22 989.35 989.48 989.62 989.75 989.38 990.02 990.15 990.28 990.42	9.9028 - 6 9.9050 9.9072 9.9094 9.9116 9.9133 9.9160 9.9182 9.9204 9.9226	8.23578 - 1 8.23761 6.237945 8.24129 8.24312 8.24312 8.24680 8.24683 8.25047 8.25231	8.2323 - 3 8.3125 8.3935 8.4753 8.5578 8.6411 8.7252 8.8101 8.8957 8.9822	5.23582 + 1 5.28684 5.33834 5.39034 5.49282 5.49580 5.54928 5.60327 5.65777 5.71278	3.2614 - 6 3.2622 3.2630 3.2636 3.2654 3.2654 3.2671 3.2679 3.2687	8.01619 - 1 8.02020 8.02221 8.02422 8.02622 8.02623 6.03024 8.03225 8.03426 8.03627
99000 99200 99400 99600 100000 100200 100400 100600 100800	99472 99674 99876 100078 100280 100484 100684 101088 101296	990.55 990.68 990.81 990.95 991.08 991.21 991.35 991.48 991.61	9.9248 - 6 9.9270 9.9293 9.9315 9.9337 9.9359 9.9381 9.9403 9.9425 9.9447	8.25414 - 1 8.255781 8.25765 8.25765 8.26148 8.26331 8.26515 8.26698 8.26698	9.0696 - 3 9.1577 9.2467 9.3365 9.4271 9.5187 9.6110 9.7043 9.7044 9.8934	5.76832 + 1 5.82437 5.88096 5.93808 5.935784 6.05395 6.11270 6.17200 6.23187 6.29230	3.2695 - 6 3.2703 3.2712 3.2720 3.2728 3.2736 3.2736 3.2752 3.2761 3.2761	8.03828 - 1. 8.04028 8.04029 8.04430 8.04631 8.04632 8.05032 8.05032 8.05233 8.05233 8.05233
101000 101200 101400 101600 101800 102000 102200 102400 102600 102800	101492 101694 101895 102097 102299 102501 102703 102905 103107 103309	991.88 992.01 992.14 992.28 992.41 992.54 992.68 992.81 992.94 993.07	9-9469 - 6 9-9491 9-9513 9-9535 9-9557 9-9557 9-9601 9-9623 9-9645 9-9667	8.27248 - 1 8.27432 8.27615 8.27798 8.27981 8.28165 8.28348 8.28531 8.285714 8.28697	9.9893 - 3 1.0086 - 2 1.0184 1.0283 1.0382 1.0483 1.0584 1.0686 1.0770	6.35331 + 1 6.41488 6.47704 6.53978 6.60311 6.66704 6.73157 6.77670 6.86245 6.92881	3.2777 - 6 3.2785 3.2793 3.2801 3.2810 3.2818 3.2826 3.2834 3.2834 3.28350	8.05835 - 1 8.06036 8.06237 8.06437 8.06639 8.06639 8.07039 8.07240 8.07241
103000 103200 103400 103600 103800 104000 104200 104400 104600	103511 103713 103915 104117 104319 104521 104723 104925 105127	993.21 993.34 993.47 993.60 993.74 993.87 994.00 994.14 994.27	9-9689 - 6 9-9711 9-9733 9-9755 9-9777 9-9779 9-9821 9-9843 9-9845 9-9887	8.29081 - 1 8.29264 8.29447 8.29630 8.29813 8.29996 8.30179 8.30362 8.30545 8.30728	1.1000 - 2 1.1106 1.1213 1.1222 1.1431 1.1554 1.1653 1.1765 1.1879 1.1993	6.99580 + 1 7.06343 7.13168 7.20057 7.27012 7.34031 7.41116 7.48269 7.55487 7.62774	3.2859 - 6 3.2867 3.2875 3.2883 3.2891 3.2899 3.2907 3.2916 3.2924 3.2924	8.07842 - 1 8.08043 8.08243 8.08444 8.08644 8.08644 8.09045 8.09246 8.09246 8.09446
105000 105500 104000 104500 107000 107500 108500 109000 109500	105531 106036 106542 107047 107552 108057 108562 109067 109573	994.55 995.48 996.40 997.33 998.25 999.18 1000.10 1001.02 1001.95	9.9912 - 6 1.0007 - 5 1.0022 1.0037 1.0053 1.0068 1.0083 1.0099 1.0114 1.0129	8.30932 - 1 8.32212 8.33490 8.34768 8.36045 8.37320 8.38595 8.37320 8.41140	1.2109 - 2 1.2430 1.2759 1.3096 1.3441 1.3794 1.4156 1.4527 1.4907 1.5296	7.70173 + 1 7.90580 8.11487 8.32906 8.54849 8.77327 9.00352 9.23937 9.48094 9.72835	3.2941 - 6 3.2998 3.3055 3.3112 3.3169 3.3226 3.3283 3.3340 3.3397 3.3454	8.09871 - 1 8.11274 8.12677 8.12677 8.15480 8.15480 8.16881 8.19281 8.19681 8.21080 8.22478
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TABLE VI.—Continued.
GEOMETRIC, ALTITUDE, ENGLISH UNITS

4 -44	Sound	Confficient			<u> </u>		
Altitude	speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal :c	onductivity
Z, fr H, ft	C _{s.} , ft sec.	μ , lb ft sec sec s	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^-$!	$\frac{\eta}{\eta_0}$	k., BTU fi ⁻¹ sec ⁻¹ (°R) ⁻¹	k ko
91000 90605 91200 90803 91400 91001 91800 91398 92000 91398 92200 91796 92400 91992 92400 92191 92800 92389	985.08 985.21	9.8320 - 6 9.8382 9.8364 9.8366 9.8406 9.8430 9.8452 9.8474 9.8496 9.8518	8.17691 - 1 8.17873 8.18056 8.18239 8.18422 8.18628 8.18787 8.18787 8.18787 8.18970	6.0200 - 3 6.0877 - 6.1470 - 6.2049 6.2049 6.2053 6.3283 6.3899 6.4521 6.5148 6.5781	3.834%7 + 1. 3.8718% 3.90056 3.94763 3.98607 4.02486 4.06603 4.10356 4.10356 4.18347 4.18375	3.2352 - 6 3.2360 3.2368 3.2376 3.2384 3.2393 3.2401 3.2409 3.2417 3.2417	7.95387 - 7.95587 7.95786 7.95986 7.96185 7.96385 7.96384 7.96784 7.96983 7.97183
93000 92587 93200 92785 93400 92785 93600 93182 93800 93580 94200 93773 94200 93773 94000 94773 94800 94173	986.80 986.93 987.07 987.20	9.8539 - 6 9.8561 9.8583 9.8605 9.8627 9.8649 9.8671 9.8693 9.8715 9.8737	8.19518 - 1 8.19700 8.19883 8.20065 8.20248 8.20430 8.20433 8.20433 8.20775 8.20778	6.6421 - 3; 6.7066 6.7717 6.8375 6.9039 6.9709 7.0385 7.1068 7.1757 7.2453	4.22541 + 1 4.26546 4.30689 4.34871 4.39093 4.43354 4.47656 4.51998 4.56580 4.60804	3.2433 - 6 3.2449 3.2457 3.2456 3.2474 3.2474 3.2482 3.2498 3.2498	7.97382 - 7.97582 7.97781 7.97780 7.98180 7.98379 7.98578 7.98778 7.98777
95000 94569 95200 94767 95400 94966 95600 95164 95800 95362 94200 9556 94200 95758 94800 96353	987.59 987.73 987.86 987.99 988.20 988.20 988.59 988.52 988.52	9.8759 - 6 9.8781 9.8803 9.8825 9.8847 9.8849 9.8890 9.8912 9.8934 9.8934	8.21343 - 1 8.21525 8.21707 8.21890 8.22072 8.22254 8.22436 8.22436 8.22801 8.22801	7.3155 - 3 7.3663 7.4579 7.5301 7.6030 7.60765 7.7508 7.8258 7.9014 7.9078	4.65270 + 1 4.69778 4.74327 4.78920 4.83556 4.8235 4.92958 4.97726 5.02538 5.07396	3.2514 - 6 3.2522 3.2530 3.2539 3.2547 3.2555 3.2555 3.2571 3.2579 3.2579	7.99376 - 7.99575 7.99773 7.99973 8.00173 8.00372 8.00571 8.00770 8.00969
97000 96551 97200 96749 97400 97457 97600 97145 98000 97343 98000 97542 98200 97740 98400 9738 98400 9738	988.92 989.05 989.18 989.31 989.45 989.58 989.71 989.84 989.97	9.8978 - 6 9.9000 9.9022 9.9044 9.9064 9.9087 9.9131 9.9133 9.9175	8.23165 - 1 3.23347 8.23529 8.23711 8.23893 8.24075 8.24439 8.24439 8.24431 8.24839	8.0549 - 3 8.1327 8.2112 8.2905 8.3705 8.4513 8.5328 8.6151 8.6982 8.7820	5.12298 + 1 5.17247 5.22242 5.27284 5.37510 5.37510 5.42695 5.47928 5.53211 5.58543	3.2595 - 6 3.2603 3.2611 3.2620 3.2628 3.2636 3.2654 3.2652 3.2660 3.2666	8.01367 8.01766 8.01766 8.01766 8.02164 8.02363 8.02562 8.02761 8.02960 8.03159
99000 98532 99200 98730 99400 98928 99400 99127 100000 99523 100200 99721 100400 9919 100400 100315	990.24 990.37 990.50 990.63 990.76 990.90 991.03 991.16 991.29	9.9197 - 6 9.9219 9.9241 9.9262 9.9264 9.9306 9.9328 9.9372 9.9372 9.9373	8.24985 - 1 8.25187 8.25330 8.25712 8.25712 8.26075 8.26075 8.26439 8.26620	8.8666 - 3 8.9520 9.0382 9.1252 9.2130 9.3017 9.3912 9.4815 9.5726	5.63924 + 1 5.69336 5.74838 5.80372 5.85957 5.91595 6.02028 6.03028 6.04676	3.2676 - 6 3.2684 3.2692 3.2700 3.2700 3.2717 3.2725 3.2725 3.2723 3.2741	8.03358 8.03537 8.03754 8.03755 8.04154 8.04352 8.04551 8.04750 8.04789 8.05148
101000 100513 101200 100711 101400 10107 101400 101107 101800 101505 102000 101504 102200 101504 102400 102008 102400 102008 102400 102008	991.55 991.69 991.82 991.95 992.08 992.21 992.34 992.48 992.61 992.74	9.9415 - 6 9.9437 9.9459 9.9481 9.9503 9.9524 9.9546 9.9546 9.9546 9.9590 9.9612	8.26802 - 1 8.26984 8.27165 8.27347 8.27528 8.27710 8.27891 8.28073 8.28073 8.28254 8.28436	9.7574 - 3 9.8512 9.9457 1.0041 - 2 1.0138 1.0235 1.0333 1.0432 1.0532 1.0633	6.20581 + 1 6.265%2 6.32557 6.38529 6.%758 6.57186 6.63%87 6.63%87 6.6666	3.2757 - 6 3.2765 3.2773 3.2781 3.2789 3.2797 3.2806 3.2814 3.2822 3.2830	8.05347 8.05546 8.05744 8.05943 8.06142 8.06341 8.06539 8.06738 8.06937
103000 102494 103200 102692 103400 102890 103600 103886 103600 103286 104000 103484 104200 103682 104400 104078 104600 104078	993.26 993.40 993.53 993.66 993.79 993.92	9.9634 - 6 9.9655 9.9677 9.9677 9.9721 9.9743 9.9748 9.9764 9.9808 9.9830	8-28617 - 1 8-28798 8-28780 8-29161 8-29342 8-29523 8-29705 8-29886 8-30067 8-30248	1.0735 - 2 1.0838 1.0941 1.1046 1.1152 1.1258 1.1366 1.3475 1.1584	6.82744 + 1 6.89282 6.95882 7.02543 7.09265 7.16050 7.22896 7.29809 7.36784 7.43824	3.2838 - 6 3.2846 3.2054 3.2862 3.2878 3.2878 3.2886 3.2894 3.2903 3.2911	8.07334 - 8.07533 8.07731 8.07731 8.07930 8.08129 8.08327 8.08526 8.08724 8.08923 8.09121
105000 10474 105500 104969 106000 105464 106500 105959 107300 106454 108500 107444 108500 107444 108500 10893 109500 108928	998.16 999.07 999.99 1000.90	9.9851 - 6 9.9906 1.0005 - 5 1.0021 1.0036 1.0051 1.0081 1.0081 1.0097	8.30429 - 1 8.30882 8.32119 8.33385 8.34650 6.35914 8.37176 8.38438 8.39698 8.40957	1.1807 - 2 1.2091 1.2407 1.2732 1.3065 1.3405 1.3754 1.4111 1.4477 1.4852	7.50929 + 1 7.68982 7.89990 8.09747 8.52572 8.74761 8.97485 9.20753 9.44580	3.2919 - 6 3.2939 3.2994 3.3051 3.3103 3.3103 3.3220 3.3276 3.3332 3.3389	8.09320 8.09816 8.11173 8.12561 8.13949 8.15336 8.16723 8.18108 8.19494 8.20878

TABLE VI.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	tude	Sound speed	Coefficient	of viscosity	r - 44		Thermal	conductivity
H, ft	Z, ft	C _s , ff sec ⁻¹	μ , lb ft $^{-1}$ sec $^{-1}$	$\frac{\mu}{\mu_0}$	η_{i} ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k , BTU ft ⁻¹ sec ⁻¹ (°R) ⁻¹	k k _O
110000 110000 111000 111000 112000 112000 113000 113500 114500	111089 111594 112099 112605	1003.79 1004.71 1005.62 1006.54 1007.46 1208.37 1009.29 1010.20 1011.11 1012.03	1.0145 = 5 1.0160 1.0175 1.0190 1.0205 1.0221 1.0236 1.0251 1.0281	8.43682 - 1 8.44951 8.46220 8.47487 8.48753 8.50018 8.51282 8.52546 8.53808 8.55069	1.5694 - 2 1.6102 1.6520 1.6948 1.7886 1.7885 1.8294 1.8764 1.9764 1.9739	9.98174 + 1 1.02412 + 2 1.05070 1.0779 1.0578 1.13431 1.16353 1.19344 1.22406 1.25541	3.3511 - 6 3.3568 3.3624 3.3601 3.3738 3.3775 3.3851 3.3908 3.3965 3.4021	8.23876 - 1 8.2527k 8.26671 8.28067 8.279463 8.30858 8.30252 8.33646 8.35040 8.35040
115000 115500 116000 116500 117500 117500 118500 119000	115638 116143 116649 117155 117660 118166 118672 119177 119683	1012.94 1013.85 1014.76 1015.67 1016.58 1017.48 1018.39 1019.30 1020.20 1021.11	1.0297 - 5 1.0312 1.0327 1.0382 1.0357 1.0372 1.0387 1.0402 1.0417	8.56329 - 1 8.57588 8.58846 8.60103 8.61359 8.62614 8.63868 8.65121 8.66373 8.67624	2.0243 - 2 2.0760 2.1289 2.1830 2.284 2.2951 2.3531 2.4125 2.4733 2.5355	1.28750 + 2 1.32036 1.35399 1.388% 1 1.42364 1.45970 1.49661 1.53438 1.57303 1.61259	3.4078 - 6 3.4135 3.4191 3.4248 3.4304 3.4361 3.4477 3.4530 3.4530	8.37825 - 1 8.39217 8.40608 8.41999 8.43389 8.47555 8.46167 8.47555 8.48943 8.50330
120000 120500 121000 121500 122500 122500 123000 123000 124000 124500	121706 122212 122718 123224 123730 124236 124742	1022.01 1022.91 1023.81 1024.72 1025.62 1026.52 1027.41 1028.31 1029.21	1.0447 - 5 1.0462 1.0477 1.0492 1.0507 1.0522 1.0537 1.0552 1.0567 1.0582	8-68874 - 1 8-70123 8-71371 8-72618 8-73864 8-75109 8-76354 8-77597 8-78239 8-80080	2.5991 - 2 2.6642 2.7399 2.7990 2.8688 2.9401 3.0131 3.0678 3.1642 3.2424	1.65306 + 2 1.69448 1.73685 1.73685 1.78021 1.82457 1.86996 1.91638 1.96388 2.01247 2.06217	3.46436: 3.4700 3.4756 3.4812 3.4869 3.4925 3.4981 3.5037 3.5094 3.5150	8.51717 - 1 8.53103 8.54489 8.55873 8.57256 8.58642 8.60025 8.61407 8.62789 8.64171
125000 125500 126000 126500 127000 127500 128500 128500 129500	126260 126766 127272 127778 126284 128791 129297	1031.00 1031.90 1032.79 1033.68 1034.58 1035.47 1036.36 1037.25 1038.14 1039.03	1.0597 - 5 1.0612 1.0627 1.0642 1.0657 1.0671 1.0686 1.0701 1.0716	8.81320 - 1 8.82559 8.83797 8.85035 8.86271 8.87506 8.88790 8.89974 8.91206 8.92438	3.3223 - 2 3.4040 3.4877 3.5732 3.6606 3.7501 3.8415 3.9351 4.0307 4.1285	2.11300 + 2 2.16500 2.21818 2.27257 2.32819 2.38508 2.44325 2.50273 2.56356 2.62575	3.5206 - 6 3.5262 3.5318 3.5374 3.5430 3.5486 3.5542 3.5598 3.5654 3.5710	8.65552 - 1 8.66932 8.68312 8.69691 8.71070 8.72448: 8.73826 8.75203 8.76579 8.77955
130000 130500 131000 131500 132500 132500 133500 134500	131828 132335 132841 133347 133854 134360	1039.91 1040.80 1041.69 1042.57 1043.46 1044.34 1046.23 1046.11	1.0746 = 5 1.0760 1.0775 1.07790 1.0805 1.0819 1.0834 1.0849 1.0863	8-73668 - 1 8-94898 8-96126 8-97354 8-98580 8-98560 9-01031 9-02254 9-03477 9-04699	4.2285 - 2 4.3307 4.43521 4.5513 4.7630 4.8771 4.9938 5.1131 5.2350	2.68935 + 2 2.75436 2.82084 2.86880 2.95627 3.02930 3.10190 3.17611 3.25196 3.32950	3.5766 - 6 3.5822 3.5878 3.5934 3.5990 3.6046 3.6101 3.6157 3.6213 3.6269	8.79330 - 1. 8.80705 8.82079 8.83452 8.84825 8.86198 8.87569 8.87569 8.90311 8.90311
135000 135500 136000 136500 137000 137500 138000 138500 139000	136386 136893 137399 137906 138413 138919 139426 139933	1048.75 1049.63 1050.51 1051.39 1052.27 1053.14 1054.02 1054.89 1055.77	1.0893 - 5 1.0908 1.0922 1.0937 1.0951 1.0966 1.0981 7.0985 1.1010 1.1024	9.05920 1 9.07140 9.08359 9.09577 9.10794 9.12011 9.13226 9.14440 9.15654 9.16866	5.3596 - 2 5.4869 5.6171 5.7501 5.8860 6.0249 6.1668 6.3118 6.4600 6.6114	3.40874 + 2 3.48974 3.57251 3.65710 3.74355 3.83188 3.92215 4.01439 4.10863 4.20493	3.6324 - 6 3.6380 3.6436 3.649.1 3.6547 3.6603 3.6658 3.6714 3.6769 3.6825	8.93051 - 1 8.94420 8.95788 8.977156 8.98524 8.99890 9.01256 9.02622 9.03428 9.05351
140000 140500 141000 141500 142000 142500 143000 144000 144500	141453 141960 142467 142974 143480 143987 144494 145001	1057.52 1058.39 1059.26 1060.13 1061.00 1061.87 1062.74 1063.61 1064.47 1065.34	1.1039 - 5 1.1054 1.1068 1.1063 1.1097 1.112 1.1126 1.1126 1.1155 1.1170	9-18078 - 1 9-17289 9-20498 7-21707 9-22915 9-24122 9-253328 9-26533 9-27737	6.7661 - 2 6.9242 7.0856 7.2506 7.4191 7.5912 7.7670 7.9466 8.1301 8.3174	4.30331 + 2 4.40383 4.50452 4.6142 4.71859 4.82806, 4.93989 5.05411, 5.17078) 5.28995	3.6880 - 6 3.6936 3.6936 3.7046 3.7102 3.7157 3.7213 3.7268 3.7323 3.7378	9.06715 - 1 9.08079 9.09441 9.10804 9.12165 9.13526 9.14887 9.14227 9.17606 9.18965
145000 145500 146000 146500 147000 147500 148000 149500 149500	146522 147029 147537 148044 148551 149058 149565 150072	1066.21 1067.07 1067.94 1068.80 1069.66 1070.53 1071.39 1072.25 1073.11 1073.97	1.1184 - 5 1.1199 1.1213 1.1227 1.1242 1.1256 1.1271 1.1265 1.1299 1.1314	9.30.1%3 - 1 9.313%5 9.325%5 9.325%5 9.337%5 9.340%4 9.361%1 9.37338 9.38535 9.39730 9.4092%	8.5088 - 2 8.7042 8.9038 9.1076 9.3158 9.5283 9.7457 1.0193 - 1	5.41165 + 2 5.53595 5.66289 5.79253 5.92492 6.06010 6.19815 6.33910 6.48303 6.62997	3.7434 - 6 3.7489 3.7544 3.7559 3.7654 3.7710 3.7765 3.7820 3.7875 3.7820	9.20323 - 1 9.21680 9.23038 9.24394 9.25750 9.27105 9.28460 9.29814 9.31168 9.32521
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TABLE VI -- Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Alti	tude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal o	conductivity
Z, ft	H, ft	C _s ,	μ , lb ft $^{-1}$ sec $^{-1}$	$\frac{\mu}{\mu_0}$	η , fi ² sec ⁻¹	$\frac{\eta}{\eta_0}$	k, BTU fi ⁻¹ sec ⁻¹ (PR) ⁻¹	k k ₀
170000; 110500 111000 111000 112500 112500 113500 113500 114500	109423 109918 110412 110907 111402 111896 112391 112380 113380	1002.72 1003.63 1004.54 1005.45 1006.36 1007.27 1008.17 1009.08 1009.08 1009.89	1.0127 - 5 1.0132 1.0157 1.0157 1.0187 1.0202 1.0217 1.0232 1.0247 1.0262	8.42216 - 1 8.43473 8.44729 6.45984 8.4728 8.48491 8.50993 8.52243 8.53492	1.5235 - 2 1.5628 1.6630 1.6442 1.6863 1.7295 1.7736 1.8188 1.8651 1.9124	9-68975 + 1 9-93953 1-01953 + 2 1-04571 1-07251 1-09995 1-12803 1-15678 1-18620 1-21632	3.3445 - 6. 3.3558 3.3558 3.3614 3.3670 3.3726 3.3782 3.3838 3.3838 3.3895	8.22262 - 1 8.23646 8.25029 8.26411 8.27792 8.29173 8.30554 8.31933 8.33312 8.34691
115000 115500 11600 11600 117000 117500 118500 119500 119500	114369 115358 115358 115853 116347 116342 117356 117830 118325 118819	1011-79 1012-69 1013-59 1014-49 1015-39 1016-29 1017-19 1018-08 1018-98 1019-87	1.0277 - 5 1.0292 1.0307 1.0322 1.0337 1.0352 1.0367 1.0362 1.0397	i. <u>4</u>	1.9609 - 2 2.0105 2.0412 2.1132 2.1663 2.2207 2.2764 2.3333 2.3915 2.4511	1-24714 + 2 1-27869 1-31097 1-34400 1-37780 1-41239 1-44778 1-40399 1-52104 1-55894		8.36069 - 1 8.37446 8.38822 8.40198 8.41574 8.42948 8.44323 8.45696 8.47069 8.48441
120000 120500 121000 121500 122500 122500 123500 123500 124500	119313 119808 120302 120796 121290 121785 122279 122773 123267 123761	1020.77 1021.66 1022.55 1023.45 1024.34 1025.23 1026.12 1027.01 1027.89 1028.78	1.0427 - 5 1.0442 1.0456 i.0471 1.0486 1.0501 1.0516 1.0531 1.0545	8.67157 - 1 8.68394 8.69629 8.70863 8.72096 8.73328 8.74559 8.75789 8.77017 8.78245	2.5121 - 2 2.5745 2.6363 2.7035 2.7703 2.8385 2.9084 2.9798 3.0528 3.1275	1.59772 + 2 1.63738 1.67796 1.71946 1.76191 1.80534 1.84975 1.89516 1.94161 1.98911	3.4566 = 6. 3.4627 3.4677 3.4733 3.4789 3.4884 3.4990 3.4956 3.5011 3.5067	8.49813 - 1 8.51184 8.52554 8.53924 8.55293 8.550661 6.58029 8.59397 8.60763 8.62129
125000 125000 124000 124000 127500 127500 128000 128500 129000 129500	124255 124749 125243 125737 126231 126725 127219 127713 128207 128701	1029.67 1030.55 1031.44 1032.32 1033.20 1034.08 1034.97 1035.85 1036.73 1037.61	1.0575 - 5 1.0590 1.0604 1.0619 1.0634 1.0648 1.0663 1.0678 1.0692 1.0707	8.79472 - 1 8.80698 8.81923 8.83147 8.84370 8.85591 8.86812 8.86812 8.89251 8.99469	3.2039 - 2 3.2020 3.3618 3.4435 3.5270 3.6123 3.6996 3.7886 3.8800 3.9732	2.03769 + 2 2.08736 2.13815 2.19008 2.24317 2.29746 2.35296 2.40970 2.46770 2.52699	3.5122 - 6 3.5178 3.5233 3.5289 3.5344 3.5400 3.5455 3.5510 3.5566 3.5621	9.63495 - 18.64859 8.668223 8.67567 8.68950 8.70312 8.71674 8.73035 8.74395 8.75755
130000 130500 131000 131500 132500 132500 133500 134500 134500	129195 129688 130182 130676 131170 131663 132157 132651 133144 133638	1038.48 1039.36 1040.24 1041.11 1041.99 1042.86 1043.74 1044.61 1045.48 1046.35	1.0722 - 5 1.0736 1.0751 1.0766 1.0780 1.0795 1.0809 1.0824 1.0836 1.0853	8.91685 - 1 8.949116 8.94116 8.95330 8.96543 8.97755 8.98965 9.00175 9.01384 9.02592	4.0685 - 2 4.1659 4.2655 4.3672 4.4712 4.5775 4.6861 h.7771 4.9106 5.0265	2.58760 + 2 2.64955 2.71287 2.77759 2.84373 2.91133 2.98042 3.05102 3.12316 3.19688	3.5676 - 6 3.5737 3.5787 3.5842 3.5897 3.5952 3.6007 3.6062 3.6118 3.6173	8.77114 - 1 8.78473 8.79831 8.61188 8.82545 8.83901 8.85256 8.86611 8.87766 8.89319
13500 13500 13600 13600 13700 137500 13800 138500 13900 139500	134132 134625 135119 135612 136106 136599 137093 137586 138080 138573	1047.22 1048.09 1048.96 1049.83 1050.70 1051.56 1052.43 1053.29 1054.16 1055.02	1.0867 - 5 1.0882 1.0896 1.0911 1.0925 1.0950 1.0954 1.0969 1.0983 1.0997	9.03799 - 1 9.05005 9.06210 9.07414 9.08617 9.09819 9.11020 9.12220 9.13819 9.14618	5.1449 - 2 5.2659 5.3896 5.5159 5.6450 5.7768 5.9115 6.0471 6.1897 6.3333	3.27221 + 2 3.34918 3.42782 3.50817 3.59025 3.67412 3.75979 3.84730 3.93670 4.02602	3.6228 - 6 3.6283 3.6338 3.6393 3.6488 3.6502 3.6557 3.6612 3.6667 3.6722	8-90672 - 1 8-92025 8-93376 8-94727 8-94727 8-97428 8-98777 9-00126- 9-01474 9-02821
140000 140500 141500 141500 142500 142500 143500 143500 144500	139066 139560 140053 140546 141040 141533 142026 142519 143012 143506	1054.75	1.1012 - 5 1.1026 1.1041 1.1055 1.1069 1.1084 1.1098 1.1112 1.1127	9-15815 - 1 9-17011 9-18206 9-19401 9-20594 9-21786 9-22978 9-21786 9-25558 9-25558	6.4799 - 2 6.6297 6.7827 6.9390 7.0985 7.2615 7.4279 7.5979 7.7714 7.9486	h.12129 + 2 h.21656 h.31386 h.h132h h.5187h h.61839 h.72823 h.83232 h.94270 5.03580	3.6777 - 6 3.6831 3.6886 3.6951 3.6955 3.7050 3.7105 3.7159 3.7214 3.7268	9-04168 - 1 9-05514 9-06860 9-08203 9-07549 9-10893 9-12236 9-13570 9-14920 9-16262
145000 145500 146500 147500 147500 148500 148500 148500 149500	145985 145478 145971 146464 146957 147450 147943	1065.33 1066.18 1067.03 1067.03 1067.89 1068.74 1069.59 1070.44 1071.29 1072.14	1.1155 - 5 1.1169 1.1198 1.1212 1.1226 1.1241 1.1255 1.1269 1.1263	9.2773h - 1 9.28921 9.30107 9.31292 9.32475 9.33658 9.34881 9.34022 9.37202 9.38381	8.1276 - 2 8.3143 8.5029 8.4955 8.8721 9.0928 9.2977 9.5069 9.7204 9.9383	5.17048 + 2 5.728797 5.40794 5.53041 5.65545 5.78310 5.91342 6.04644 6.3223 6.32084	3.7323 - 6 3.7378 3.7432 3.7486 3.7541 3.7595 3.7650 3.7758 3.7758 3.7758	9.17602 - 1 9.189%2 9.20282 9.21621 9.22959 9.24296 9.25633 9.26970 9.28305 9.296%0

TABLE VI.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

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Altitude	Sound	Coefficient	of viscosity	Kinematic	viscosity	Thermal c	ónductivity	,
H, ft Z, ft	C _s .,	μ , ib ff sec sec μ	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^-$	$\frac{\eta}{\eta_0}$	k, STU fi ⁻¹ sec ⁻¹ (°R) ⁻¹	-k -k _o	
150000 15108 150500 15159 151000 15210 15200 15210 152000 15311 152500 15312 153000 15313 153500 15514 15463 15463 15463 15463	1075.69 1076.54 1077.40 1078.26 1079.11 1079.97 1080.82 1081.68	1.1328 - 5 1.1342 1.1357 1.1371 1.1385 1.1400 1.1414 1.1428 1.1443	9.42117 - 1 9.43310 9.44501 9.45692 9.4682 9.46871 9.49259 9.50446 9.51632 9.52105	1-0660 = 1 1-0901 = 1 1-1147 1-1147 1-1398 1-1654 1-1916 1-2183 1-2455 1-2734 1-2996	6.78001 + 2 6.93318 7.08957 7.24921 7.41219 7.57656 7.76839 7.92174 8.09868 8.26531	3.7985 - 6 3.8095 3.8095 3.8150 3.8260 3.8260 3.8315 3.8369 3.8369 3.8424 3.6446	9.33874 ~ 1' 9.35226 9.36577 9.37928 9.39278 9.40628 9.41977 9.48673 9.45211	
155000 15616 155500 15666 154000 15717. 156500 15718. 157000 15819 157500 15820 158500 15920 158500 15920 159500 16072.	1082.02 1082.02 1082.02 1082.02 1082.02 1082.02 1082.02 1082.02 1082.02	1.1448 - 5 1.1448 1.1448 1.1448 1.1448 1.1448 1.1448 1.1448 1.1448	9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105	1.3248 - 1 1.3505 1.3768 1.4035 1.4035 1.4586 1.4586 1.5158 1.5158 1.55452	8.42584 + 2 8.58950 8.75634 8.92641 9.09979 9.27654 9.45672 9.64040 9.82764 1.00185 + 3	3.8446 - 6 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446	9.45211 - 1 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211	
160000 16123 160500 16174 161000 16225 161500 16276 162000 16326 163500 16479 164000 16530 164500 16580	1082.02 1082.02 1082.02 1082.02 1082.02	1.1448 - 5 1.1448 1.1448 1.1448 1.1448 1.1448 1.1448 1.1448 1.1448	9.52105 — 1 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105	1.6058 - 1 1.6370 1.6488 1.7012 71.7343 1.7347 1.8023 1.8373 1.8730 1.9094	1.02131 + 3 1.081137 1.06137 1.08199 1.10300 1.72243 1.14627 1.16853 1.19123 1.21436	3.84%6 - 6 3.84%6 3.84%6 3.84%6 3.84%6 3.84%6 3.84%6 3.84%6 3.84%6	9.45211 - 1 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211	1
165000 16631 165500 16682 166000 16784 167500 16834 167500 16834 167500 16936 168000 16936 168500 16936 169500 77088	1082.02 1062.02 1062.02 1082.02 1082.02 1082.02 1082.02 1082.02	1. 1448 ~ 5 1: 1448 1. 1448 1. 1448 1. 1448 1. 1448 1. 1448 1. 1448	9.52105 - 1 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105	1.9464 - 1 1.9842 2.0228 2.0621 2.1021 2.1430 2.1846 2.2270 2.2703 2.3144	1.23795 + 3 1.26200 1.28651 1.31150 1.33697 1.36294 1.38941 1.41640 1.44591 1.47195	3.8446 - 6 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446	9.45211 - 1 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211	
170000 17139 170500 17190 171500 17241 171500 17261 172500 17343 172500 17343 173500 17445 174000 17546 174500 17597	1082-02 1081-53 1080-92 1080-31 1079-70 1079-09 1078-48	1.1448 - 5 1.1440 1.1440 1.1430 1.1420 1.1420 1.1399 1.1379 1.1369	9.52105 - 1 9.52105 9.51434 9.50587 9.49739 9.48891 9.48042 9.47193 9.46343 9.46343	2.3593 - 1 2.4051 2.4480 2.4905 2.5339 2.5781 2.6231 2.6689 2.7154 2.7632	1.5005% + 3 1.52989 1.55692 1.58800 1.61159 1.63969 1.66831 1.69746 1.72715 1.75740	3.8446 - 6 3.8415 3.8515 3.8376 3.8377 3.8297 3.8258 3.8219 3.8180 3.6141	9.45211 - 1 9.45211 9.45485 9.42582 9.42522 9.41559 9.40595 9.39631 9.38667 9.37702	
175000 17648 175500 17699 176500 177800 177600 17851 177500 17951 178500 17952 178500 18004 179500 18055 179500 18055	1076.03 1075.42 1074.81 1074.19 1073.58 1072.97	1.1358 - 5 1.1348 1.1338 1.1328 1.1317 1.1307 1.1297 1.1287 1.1266	9.445792 9.443792 9.42940 9.42988 9.41236 9.40383 9.39530 9.38476 9.37822 9.36967	2.8116 - 1 2.8610 2.9113 2.9625 3.0147 3.0678 3.1220 3.1771 3.2334 3.2906	1.78822 + 3 1.81961 1.85158 1.88416 1.91734 1.95115 1.98560 2.02069 2.02644 2.09287	3.8101 - 6 3.8062 3.8023 3.7983 3.7984 3.7905 3.7866 3.7866 3.7787 3.7787	9.36737 - 1 9.35772 9.34806 9.33841 9.32875 9.31908 9.30942 9.29975 9.29908 9.28040	
180000 18156 180500 18207 181500 18309 182500 18309 182500 1841 183500 18462 183500 18512 184500 18563 184500 18563	1069-89 1069-27 1068-66 1068-04 1067-42 1066-80 1066-19 1065-57	1.1256 - 5 1.1246 1.1235 1.1225 1.1225 1.1204 1.1194 1.1184 1.1173 1.1163	9.36112 - 1 9.35257 9.3450.1 9.33584 9.32687 9.31830 9.30772 9.30174 9.20255 9.28396	3.3490 - 1 3.4084 3.4090 3.5308 3.55937 5.6578 3.7231 3.7231 3.8575 3.9266	2.12998 + 3 2.16780 2.20633 2.24550 2.28550 2.32637 2.36791 2.61024 2.455338 2.49734	3.7708 - 6 3.7669 3.7629 3.7590 3.7551 3.7551 3.7472 3.7432 3.7432 3.7393 3.7353	9.27072 - 1- 9.26104 9.25136 9.22167 9.223198 9.22229 9.21260 9.20290 9.19320 9.18349	
185000 18465 185500 18716 184000 18767 184500 18689 187500 18690 188000 18971 188000 19022 189000 19022 189500 19123	1063.71 1063.09 1062.47 1061.85 1061.23 1060.61 1059.98	1.1153 - 5 1.1142 1.1132 1.1122 1.1111 1.1101 1.1091 1.1080 1.1070 1.1059	9.27536 - 1 9.26676 9.25815 9.28954 9.24093 9.22331 9.22368 9.21505 9.20642 9.19778	3-9970 - 1 h-0688 h-1420 h-2165 h-3700 h-4489 h-529h h-611h h-6950	2.54214 + 3 2.58780 2.63133 2.68175 2.73009 2.77935 2.82956 2.88073 2.93289 2.98606	3.731% - 6 3.727% 3.7235 3.7195 3.7196 3.7116 3.7677 3.7037 3.6998 3.6998	9.17379 - 1 9.16408 9.15436 9.18463 9.13493 9.12521 9.11549 9.10576 9.09603 9.08630	

TABLE VI.—Continued

GEOMETRIC ALTITUDE, ENGLISH UNITS

Altitude		ound peed		of viscosity		viscosity	Thermal o	onductivity
Z, ft H	l, ft	C _s ,	μ , lb ff sec i	$\frac{\mu}{\mu_0}$	η, ft² seč⁻'	$\frac{\eta}{\eta_0}$	K, BTUff ⁻¹ sec ⁻¹ (PR) ⁻¹	k k _O
150500 11 151000 11 151500 11 152000 11 152500 11 153500 11	49422 107 49914 107 50407 107 50900 107 51393 107 51886 107 52378 107 52871 107	72.99 173.83 174.68 175.53 176.31 177.22 178.06 178.91 179.75 180.59	1.1207 - 5 1.13.11 1.1326 1.1340 1.1354 1.1368 1.1368 1.1396 1.1396 1.1410 1.1424	9.39559 - 1 9.40737 9.41913 9.43089 9.44263 9.45437 9.46610 9.47782 9.48953 9.50123	1.0161 - 1 1.0388 1.0620 1.0856 1.1097 1.1344 1.1595 1.1855 1.2113 1.2381	6.46232 + 2 6.60672 6.75411 6.90453 7.05805 7.21471 7.37460 7.53775 7.70424 7.87413	3.7867 - 6 3.7921 3.7975 3.8030 3.8084 3.8132 3.8192 3.8246 3.8300 3.8354	9.30975 - 1 9.32309 9.33642 9.34975 9.34675 9.36307 9.37638 9.38969 9.41629 9.41629 9.42955
155500 156000 156500 157000 157500 158000 158500 158900	54349 108 54842 108 55334 108 55827 108 56319 108 56812 108 57304 108 57797 108	81.43 82.02 82.02 82.02 82.02 82.02 82.02 82.02 82.02 82.02	1-1438 - 5 1-1448 1-1448 1-1448 1-1448 1-1448 1-1448 1-1448 1-1448	9.51292 - 1 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105	1.2653 - 1 1.2920 1.3168 1.3419 1.3676 1.3938 1.4204 1.4753 1.5035	8.04746 + 2 8-21743 8-37465 8-53486 8-69817 8-86457 9-03415 9-20696 9-38307 9-56255	3.8446 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446	9.45286 - 1 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211
160500 19 161000 19 161500 16 162000 16 162500 16 163500 16 163500 16	59274 108 59766 108 60259 108 60751 108 61243 108 61736 108 62228 108 62720 108	82.02 82.02 82.02 82.02 82.02 82.02 82.02 82.02 82.02 82.02	1 - 1448 - 5 1 - 1448 1 - 1448	9.52105 = 1 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105	1.5323 - 1 1.5616 1.5915 1.6219 1.6529 1.6529 1.6845 1.7167 1.7495 1.7830 1.8171	9.74544 + 2 9.793182 1.01218 + 3 1.03153 1.05126 1.07136 1.07136 1.07138 1.11272 1.13399 1.15567	3.8446 - 6 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446 3.8446	9.45211 1- 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211
165500 16 166500 16 166500 16 167500 16 168500 16 168500 16	54689 108 54689 108 55181 108 55673 108 56165⇔ 108 56657 108 57149 108 57641 108	62.02 62.02 62.02 82.02 82.02 82.02 82.02 82.02 82.02 82.02 82.02	1.1448 - 5 1.1448 1.1448 1.1448 1.1448 1.1448 1.1448 1.1448 1.1448 1.1448	9.52105 - 1 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105 9.52105	1.8518 - 1 1.8872 1.9233 1.9600 1.9975 2.0357 2.0746 2.1142 2.1546 2.1958	1.17777 + 3 1.20028 1.22322 1.24661 1.27043 1.279471 1.31946 1.34467 1.37037	3.8446 - 6 3.8446 3.8446 3.0446 3.8446 3.8446 3.8446 3.6446 3.8446	9.45211 = 1 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211 9.45211
170500 16 171000 16 171500 17 172500 17 172500 17 173500 17	59 117 108 59 609 108 70 101 108 70 593 108 71 085 108 71 577 108 72 068 108 72 560 107	82.02 82.02 82.02 82.02 82.02 82.02 81.43 80.83 80.23 79.63	1.1448 - 5 1.1448 1.1448 1.1448 1.1448 1.1438 1.1438 1.1428 3.1418 1.1408 1.1398	9.52105 - 1 9.52105 9.52105 9.52105 9.52105 9.51290 9.51290 9.50457 9.49623 9.48789 9.47955	2.2378 - 1 2.2805 2.3241 2.3685 2.4137 2.4551 2.4971 2.5399 2.5835 2.6278	1.42324 + 3 1.45043 1.47815 1.50639 1.53516 1.56147 1.58819 1.61540 1.64310 1.67130	3.8446 - 6 3.8446 3.8446 3.8446 3.8446 3.8408 3.8370 3.8331 3.8293 3.8254	9.45211 - 1 9.45211 9.45211 9.45211 9.45211 9.45211 9.44285 9.43338 9.42390 9.41443 9.40495
175500 17 176000 17 176500 17 177000 17 177500 17 178500 17 178500 17	74035 107 74527 107 75019 107 75510 107 76002 107 76493 107 77477 107	78.43 77.83 77.23 76.62 76.02 75.42 74.82 74.81 73.61 73.61	1.1388 - 5 1.1378 1.1358 1.1358 1.1358 1.1338 1.1328 1.1318 1.1308 1.1298	9.47119 - 1 9.46283 9.45547 9.45641 9.43774 9.42937 9.42099 9.41262 9.40823 9.39584	2.6730 - 1 2.7189 2.7658 2.8134 2.8620 2.9114 2.9618 3.0131 3.0653 3.1185	1.70003 + 3 1.72927 1.75905 1.78937 1.82025 1.85170 1.88372 1.91638 1.94955 1.98338	3.8216 - 6 3.8177 3.8130 3.8100 3.8061 3.8023 3.7984 3.7985 3.7997	9.39547 - 1 9.38599 9.37650 9.36701 9.35752 9.34803 9.33853 9.32908 9.31958
180500 17 181000 17 181500 11 182000 18 182500 18 183500 18 183500 18	79542 107 79934 107 80425 106 80917 106 81408 106 81899 106	72.40 71.80 71.19 70.59 69.98 69.38 68.77 68.16 67.56	1.1288 - 5 1.1277 1.1257 1.1257 1.1257 1.1237 1.1227 1.1217 1.1217 1.1217	9.38745 - 1 9.37906 9.37066 9.36225 9.35385 9.34544 9.33702 9.32860 9.32018 9.31175	3.1726 - 1 3.2278 3.2840 3.3412 3.3995 3.4588 3.5193 3.5899 3.6436 3.7075	2.01782 + 3 2.05291 2.08864 2.12503 2.16210 2.19986 2.23831 2.27748 2.31738 2.31738	3.7829 - 6 3.7791 3.7752 3.7713 3.7675 3.7636 3.7636 3.7559 3.7559 3.7559 3.7520	9.30053 - 1 9.29102 9.28151 9.27200 9.26249 9.25297 9.25297 9.23393 9.22441 9.21489
185500 18 186000 18 186500 18 187000 18 187500 18 188000 18 188500 18	3864 106 14356 106 14847 106 15338 106 15829 106 16320 106 16811 106	66.34 65.74 65.13 64.52 63.91 63.30 62.69 62.69 62.08 61.47 60.86	1.1186 - 5 1.1176 1.1166 1.1156 1.1146 1.1136 1.1125 1.1115 1.1105	9.30332 - 1 9.29488 9.28644 9.27800 9.26955 9.26110 9.25264 9.24418 9.23571 9.22724	3.7726 - 1 3.8389 3.9065 3.9753 4.0454 4.1168 4.1896 4.2637 4.3392 4.4161	2.39943 + 3 2.44160 2.48856 2.522632 2.57290 2.61832 2.66459 2.71173 2.75976 2.80869	3.7442 - 6 3.7404 3.7365 3.7326 3.7287 3.7248 3.7210 3.7171 3.7132 3.7093	9.20536 - 1 9.19583 9.18630 9.17676 9.16722 9.15768 9.14814 9.13860 9.12905 9.11950

TABLE VI -- Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	lude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity ,	Thermal c	onductivity.
H, ft	Z, ft	C _s ,	μ , lb ft sec $^{\prime}$	$\frac{\mu}{\mu_0}$	η, ff² sec l	$\frac{\eta}{\eta_0}$	k, BTUft ⁻¹ sec ⁻¹ (°R) ⁻¹	k k _O
- 190000 190500 191500 191500 192500 192500 193500 194500	191747 192256 192766 193275 193284 194294 194803 195822 195822	1058.12 1057.49 1056.87 1056.25 1055.62 1055.00 1054.37 1053.75 1053.75	1.1049 - 5 1.1028 1.1028 1.1018 1.1019 1.0097 1.0987 1.0976 1.0955	9.18913 - 1 9.18048 9.17183 9.16317 9.15451 9.15451 9.13717 9.12849 9.11781	4.7802 - 1 4.8671 4.9556 5.0859 5.1379 5.2317 5.3273 5.4248 5.5242 5.5255	3.04026 + 3 3.09550 3.15181 3.20922 3.26774 3.322740 3.38821 3.45022 3.51343 3.57787	3.6918 - 6 3.6879 3.6839 3.6860 3.6760 3.6720 3.6681 3.6641 3.6601 3.6562	9.07656 - 1' 9.06682 9.05708 9.04734 9.03759 9.02784 9.01809 9.00833 8.99857 8.96881
195000 195500 196000 196500 197500 197500 198000 198500 199000 199500	196841 197350 197860 198369 198879 199388 199898 200408 200917 201427	1051.87 1051.24 1050.61 1049.99 1049.36 1048.73 1048.10 1047.47 1046.84 1046.21	1.0945 - 5 1.0934 1.0924 1.0913 1.0903 1.0892 1.0882 1.0872 1.0861 1.0851	9.10243 - 1. 9.09374 9.08504 9.07633 9.06762 9.05890 9.05018 9.04146 9.03273 9.02399	5.7288 - 1 5.8342 5.9416 6.0511 6.1627 6.2746 6.3927 6.5110 6.6518 6.7549	3.64358 + 3 3.71057 3.77888 3.84852 3.91954 3.99195 4.06578 4.14107 4.21785 4.29614	3.6522 - 6 3.6482 3.6482 3.6403 3.6363 3.6323 3.6283 3.6283 3.6204 3.6164	8.97904 - 1. 8.96928 8.95951 8.94973 8.93496 8.93018 8.92040 9.91061 8.90082 8.89103
200000 200500 201000 201500 202000 202500 203500 204000 204500	201937 202447 202956 203466 203976 204486 204996 205506 206015 206525	1045.58 1044.49 1043.22 1041.96 1040.69 1039.42 1038.16 1036.88 1035.61 1034.34	1.0840 - 5 1.0822 1.0801 1.0780 1.0759 1.0737 1.0716 1.0695 1.0674	9.01525 - 1 9.00004 8.98255 8.96502 8.94747 8.92990 8.91231 8.89470 8.87708 8.85943	6.8804 - 1 6.9972 7.1122 7.2294 7.3488 7.4704 7.5943 7.7207 7.8894 7.9805	4.37599 + 3 4.45028 4.52342 4.59794 4.67387 4.75124 4.83007 4.91040 4.99027 5.07570	3.6124 - 6 3.6055 3.5975 3.5895 3.5815 3.5735 3.5456 3.5576 3.5596	8.68124 - 1 8.86421 8.84461 8.82499 8.80536 8.78572 8.76607 8.74640 8.72673 8.70704
205000 205500 206500 206500 207500 207500 208500 208500 209500	207035 207545 208055 208055 209075 209086 210096 210606 211116 211626	1033.06 1031.79 1030.51 1029.23 1027.95 1026.66 1025.38 1024.09 1022.80 1027.51	1.0631 - 5 1.0610 1.0589 1.0548 1.0546 1.0525 1.0503 1.0482 1.0481	8.84176 - 1 8.82407 8.80637 8.78864 8.77089 8.75312 8.73534 8.71753 8.69970	8.1142 - 1 8.2505 8.3894 8.5309 8.6752 8.0223 8.9723 9.1252 9.2811	5.16073 + 3 5.24739 5.33572 5.42575 5.51753 5.61109 5.70646 5.80370 5.90283 6.00391	3.5335 - 6 3.5235 3.5175 3.5095 3.5098 3.4034 3.4654 3.4773 3.4693 3.4693	3.6873# - 1 8.66763 8.64791 8.62817 8.60843 8.58867 8.56890 8.54912 8.52933 8.50953
210000 210500 211000 211500 212000 212500 213500 213500 214500	212136 212647 213157 213157 214177 214177 214688 215198 215198 216219 216219	1020.22 1018.93 1017.63 1016.34 1015.04 1013.74 1012.44 1011.13 1009.83 1008.52	1.04:18 - 5 1.0376 1.0375 1.0353 1.0351 1.0331 1.0310 1.0288 1.0267 1.0245 1.0223	8.66399 - 1 8.68610 8.62819 8.61026 8.59231 8.57434 8.55635 8.53635 8.53635 8.52030 8.50225	9.6020 - 1 9.7673 9.9358 1.0108 + 0 1.0283 1.0042 1.0644 1.0830 1.1019	6.10697 * 3 6.21206 6.31922 6.42851 6.53996 6.65363 6.76956 6.88781 7.00843 7.13147	3.4531 - 6 3.4537 3.4289 3.4289 3.4208 3.4208 3.4047 3.3966 3.3885 3.3804	8.48971 - 1 8.48987 8.45005 8.43020 8.41034 8.39046 8.37058 8.35068 8.33077 8.31085
215000 215500 216000 216500 217000 217500 218500 218500 219000 219500	217240 217750 218261 218771 219282 2197793 220303 220814 221324 221835	1007.21 1005.90 1004.59 10033 1001.96 1000.65 999.33 998.01 996.69 995.36	1.0201 - 5 1.0180 1.0158 1.0136 1.0114 1.0019 1.0071 1.0089 1.0027	8.48417 - 1 8.46608 8.44796 8.42982 8.41166 8.39348 8.37528 8.35706 8.33882 8.32055	1.1410 + 0 1.1612 1.1817 1.2027 1.2240 1.2459 1.2681 1.2908 1.3140 1.3377	7.25698 + 3 7.38503 7.51568 7.64897 7.78498 7.92375 8.06537 8.20989 8.35738 8.50791	3.3723 - 6 3.3642 3.3661 3.3479 3.3398 3.3317 3.3235 3.3154 3.3073 3.2091	8-29092 - 1 8-27098 8-25103 8-23106 8-23106 8-21108 8-19109 8-17109 8-15108 8-13106 8-11102
220000 220500 221000 221500 222000 223000 223500 223500 224500	222346 222857 223367 223878 224389 224900 225411 225921 226432 226943	994.04 992.71 991.38 990.05 988.72 987.38 986.05 984.71 983.37 982.03	9.9827 - 6 9.9607 9.9387 9.9166 9.89%5 9.872% 9.8502 9.8281 9.8559 9.7836	8.30226 - 1 8.28396 8.26563 8.24727 8.22890 8.21051 8.19209 8.17365 8.15519 8.13671	1.3619 + 0 1.3865 1.4117 1.4374 1.4636 1.4904 1.5177 1.5856 1.57741 1.6033	8.66154 + 3 6.81836 8.97844 9.14185 9.30867 9.47899 9.65238 9.83042 1.00117 + 4	3.2910 - 6 3.2028 3.2746 3.2665 3.2563 3.25501 3.2419 3.2236 3.2256 3.2174	8.09097 - 1 8.07092 8.05085 8.03076 8.01067 7.99057 7.97045 7.95032 7.93018 7.91003
225000 225500 226000 226500 227600 227500 228500 228500 229500	227454 227965 228476 228987 229498 230009 230521 231032 231543 232054	980.68 979.34 977.99 976.64 975.29 973.58 971.23 969.87 968.51	9.7614 - 6 9.7391 9.7168 9.6945 9.6721 9.6497 9.6273 9.6049 9.5624 9.5599	8.11821 - 1 8.09968 8.08113 8.06256 8.04397 8.02535 6.00672 7.98806 7.96837 7.95067	1.6330 + 0 1.6633 1.6943 1.7260 1.7584 1.7914 1.8252 1.6596 1.8949 1.9309	1.03859 + 4 1.05790 1.07762 1.09776 1.11833 1.13935 1.16082 1.18275 1.20516	3.2092 - 6 3.2010 3.1927 3.1845 3.1763 3.1681 3.1599 3.1516 3.1834 3.1351	7-88987 - 1 7-86970 7-84951 7-82932 7-80911 7-78889 7-74842 7-74842 7-72816 7-7490

TABLE XI.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	ude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal co	onductivity
Ź, ft	H, ft	Ċ _s ,	μ , lb ft sec sec s	$\frac{\mu}{\mu_0}$	η_i ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k, BTU ff ⁻¹ sec ⁻¹ (°R) ⁻¹	k ko
_ ,	,	ft sec	lb ft" sec"	μ_{O}	ft² sec-1	<i>η</i> ο	BTU ff ⁻¹ sec ⁻¹ (°R) ⁻¹	k _o
190000	188284	1060.25	1.1085 - 5 1.1075	9.21877 - 1 9.21029	4.4945 - 1	2.85855 + 3	3.70546	9.10995 -
190500 191000	188775 189266	1059.64	1 1 106k '	9.21029 9.20181	4.6557	2.90934 2.96109	3.7015 3.6977	9.10040 9.09084
191500	189757	1058.42	1. 1054	9.19333	4.7387	3.01382	3.6938	9.08128
191500 192000 192500	189757 190248 190739	1057.81 1057.20	1.1054 1.1044 1.1034	9.18484 9.17634	4.7387 4.8231 4.9092	3.01382 3.06755 3.12230	3.6860	9.06216
193000 193500	191230 191721	1056-58 1055-97	1.1023 1.1013	. 9.16785. 9.15935	4.9969 5.0863	3.17809 3.23494 3.29286	3.0821	9.05260 9.04303
94000 194500	192212 192703	1055.36 1054.74	1.1003	9.15084 9.14233	5.1774 5.2702	3.29286 3.35189	3.6782 3.6743 3.6704	9.03346 9.02389
195000 195500	193193 193684	1054.13 1053.52	1.0983 - 5	9.13381 - 1 9.12530	5.3648 - 1 5.4612	3.41205 + 3. 3.47335	3.6665 - 6	9.01431 - 9.00474
196000	194175	1052.90	1.0972 1.0962 1.0952	9.11677	5.4612 5.5594	3.53583	3.6626 3.6587 3.6548	8.99516
196500. 197000.	194666 195156	1052.29	I 1.00k2	9.10825	5.6595 5.7615	3.59949 3.66438	3.6509	8.98558 8.97599
97000 197500 98500	1.95647	1051.06	1.0931 1.0921 1.0911 1.0900	9.09971 9.09118 9.00264	5.8655 5.9715	3.66438 3.73051 3.79791	3.6470 3.6431	8.96640 8.95682
198500	196138	1050.44 1049.83 1049.21	1.0911	7.0/410	6.0795	3.86660	3.6392 3.6353	8.94723
199000 199500	197119 197609	1049.21	1.0900	9.06555 9.05700	6.1896 6.3018	3.93662 4.00798	3.6314	8.93763 8.92804
200000. 200500	198100 198591	1047.98	1.0880 - 5 1.0870	9.04844 - 1 9.03988	6.4161 - 1 6.5327	4.08072 + 3 4.15486	3.6275 - 6 3.6236 3.6197 3.6158 3.6119 3.6046	8.91844 - 8.90884
201000	199081 199572	1046.74	1.0859	9.03131	6.6515 6.7727	423043 4.30747	3.6197	8.89924 8.88963
201500 202000 202500	200062	1045.50	1.0849 1.0839 1.0820	9.01417	6.8961 7.0092	- 4.38599	3.6119	8.88002
202500 203000	200552 201043	1044.35	1.0820	8.99822 8.98105	7.0092 7.1222	4.45789 4.52975		8.86216 8.84293
203500	201533	1041.87	1.0778	8.96385	7.2372	4.60295 4.67749	3.5890	8.82369 8.80443
204000 204500	202024 202514	1040.63	1.0758 1.0737	8.94664 8.92941	7.3544 7.4738	4.75341	3.5890 3.5812 3.5733	8.78517
205000 205500	203004 - 203495	1038.14	1.0716 - 5 1.0695 1.0675 1.0654	8-91216 - 1 8-89489 8-87761 8-86031 8-84299	7.5954 - 1 7.7193 7.8454 7.9740 8.1049	%-83075 + 3 4-90952	3.5655 - 6 3.5576 3.5498	8.76590 - 8.74662 8.72732
204000	203985 204475	1035.65	1.0675	3.87761	7.8454	4.98976	3.5498	8.72732 8.70802
206500 207000	204965	1 :033.15	1.0633	8.84299	8.1049	4.90952 4.98976 5.07150 5.15478	3.5419 3.5341	8.68871
207500 208000	205456 205946	1031.90	1.0612			5.23961 5.32604 5.41411	3.5262 3.5184 3.5105	8.66938 8.65005
208500 209000	206436 206926	1029.39	1.0591 1.0570 1.0549	8.80829 8.79091 8.77352	8.3742 8.5126 8.6537	5.41411 5.50384	3.5105 3.5026	8.63071
209500	207416	1026.88	1.0528	8.75611	8.7975	5.59527	3.4947	8.59199
210000 210500	207906 208396	1025.62	1.0507 - 5	8.73868 - 1 8.72124	8.9440 - 1 9.0932	5.68843 + 3 5.78337	3.4869 - 6 3.4790	8.57261. ~ 8.55323
211000	208886	1023.09	1.0465	8.72123 8.70376	9.2454	5.88012	3.k711	8.53383
211500 212000	209376 209866	1021.83	1.0444	8.68627	9.4004	5.97873 6.07922	3.4553	8.51443 8.49501 8.47558
212500 213000	210356 210846	1019.30	1.0425 1.0402 1.0381	8.66876 8.65124 8.63370	9.7194	6.18165 6.28605	3.4632 3.4553 3.4474 3.4395	8.47558 8.45615
213500	211336	1016.76	1.0360	8.61613 8.59855	1.0051 + 0	6.39247	3,4310 1	8.43670
214000 214500	211826 212316	1015.49	1.0339	8.59855	1.0221	6.50095 6.61153	3.4237 3.4158	8.41724 8.39778
215000	212806	1012.94	1.0297 - 5 1.0275 1.0254 1.0233 1.0212 1.0190	8.56333 - 1 8.54570	1.0573 + 0	6.72427 + 3	3,4078 - 6 3,3999	8.37830 - 8.35881
215500 214000	213296 213785	1010.39	1.0254	8.5080h	1.0938	6.95638	3.3920 3.3840	8.35881 8.33932
216500 217000	214275 214765	1009.11	1.0233	8.51036 8.49267 8.47495	1.0753 1.0753 1.0938 1.1125 1.1317 1.1512	6.83920 6.95638 7.07586 7.19769 7.32191	3.3761	8.31981 8.30029
216500 217000 217500 218000	215255 215745	1004.55	1.0190	8.47495 8.45722	1.1512	7.32191 7.44859	3.3682 3.3602	8.28076 8.26122
218500 218500 219000	216234 216724	1005.26	1.0169 1.0148 1.0126	8.43947	1.1711 1.1915 1.2122	7.57776 7.70953	3.3523 3.3443	8.24167 8.22212
219000 219500	216724. 217214	1002.69	1.0126	8.42169 8.40390	1.2122	7.70953 7.84390	3.3363	8.22212
220000	217703 218193	1000.11	1.0084 - 5	8.38609 - 1 8.36826	1.2548 + 0	7.98095 + 3 8.12073	3.3284 - 6 3.3204	8.18297 - 8.16338
221000	218682	997.53	1.0041	8.35041	1.2992	8.26332	3.3124	8.14378
221500 222000	219172	994.94	1.0019	8.33254 8.31465	1.3221	8.40878 8.55716	3.3045 3.2965	8.12417 8.10455
222500	220151 220640	993.64	9.9761	8.29674	1.3692	8.70854 8.86299	3.2885 3.2805	8.08492
223500	221130	991.04	9.9329	8.26086	1.4183	9.02056	3.2725	8.04563
224000	221619 222109	989.73 988.43	9.9113 9.8897	8.24289 8.22490	1.4436 1.4694	9.18135 9.34541	3.2645 3.2565	8.02597 8.00630
225000 225500	222598 223087	987.12	9.8680 - 6 9.8464	8.20689 - 1 8.18887	1.4957 + 0	9.51283 + 3 9.68368	3.2485 - 6 3.2405	7.98662 - 7.96693
226000	. 223577	984.50	9.8247	8.17082	1.5500	9.85804	3.2325 3.2245	7.94723
227000	224066 224555	983.19	9.7812	8.15275	1.5780	1.00360 + 4	3.2165	7.90780
227500 228000	225045 225534	980.56	9.759h 9.7376	8.11655	1.6357	1.04030	3.2084 3.2004	7.88807 7.86833
226500	226023	977.93	9.7158	8.08027 8.06210	1.6958	1.07854	3.1924 3.1843	7.84858 7.82881
229000 229500	226512 227002	975.29	9.6723	8.04391	1.7585	1.11840	3.1763	7.80904
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TABLE VI.—Continued
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

Altit	ude	Sound speed	· · · · · · · · · · · · · · · · · · ·	of viscosity			Thermal o	conductivity
H, ft	Z, ft		μ , lb ft sec $^{-1}$	$\frac{\mu}{\mu_0}$	η , ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k; BTU ft ⁻¹ sec ⁻¹ (°R) ⁻¹	k k _O
230000 230500 231000 231500 232500 232500 233500 233500 234500 234500	232565 233076 233588 234099 234610 235122 235633 236134 236656 237167	967.15 965.78 964.42 963.05 961.68 960.31 958.93 957.56 956.18 954.80	9.5374 - 6 9.5149 9.4923 9.4697 9.4697 9.4244 9.4017 9.3790 9.3563 9.3335	7.93194 - 1 7.91319 7.87942 7.87562 7.85680 7.83796 7.81910 7.80021 7.778130 7.76237	1.9677 + 0 2.00537 2.0837 2.0829 2.1240 2.1240 2.2060 2.2888 2.2926 2.3374	1.251\\$5 + \\$ 1227535 1.29978 1.32\\$75 1.35026 1.3763\\$ 1.40300 1.43025 1.45811 1.48659	3.1269 - 6 3.1104 3.1104 3.1021 3.0939 3.0856 3.0773 3.0608 3.0525	7.68762 - 1 7.66733 7.64706 7.62673 7.60640 7.56607 7.54537 7.52500 7.50462
235000 235500 236000 236500 237000 237000 238000 248500 239000 239500	237679 238190 238702 239213 239725 240256 240746 241259 241771 242263	933.42 952.03 950.65 949.26 947.87 946.48 945.08 943.69 942.29 940.89	9.3107 - 6 9.2879 9.2251 9.2422 9.2193 9.1963 9.1735 9.1504 9.1274 9.1043	7.74341 - 1 7.72443 7.70543 7.68640 7.66735 7.64735 7.64918 7.61006 7.59091 7.57174	2.3832 + 0 2.4300 2.4778 2.5268 2.5769 2.6251 2.6804 2.7340 2.7888 2.8448	1.51571 + 4 1.54549 1.57593 1.60707 1.63891 1.67147 1.70477 1.73684 1.77369 1.80934	3.0442 - 6 3.0359 3.0276 3.0193 3.0110 3.0026 2.9943 2.9860 2.9777 2.9693	7.48423 - 1 7.46383 7.48342 7.49250 7.49250 7.38212 7.36166 7.334119 7.32071 7.30022
240000 240500 241000 241500 242000 242500 243500 243500 244500	242794 243304 243818 244330 244833 245835 245865 246377 246889 247401	939.48 938.09 936.67 935.27 933.85 932.44 931.03 929.61 928.19 926.77	9.0812 - 6 9.0581 9.0350 9.0118 8.9887 8.9654 8.9422 8.9189 8.8956 8.8723	7.55255 - 1 7.552354 7.51410 7.49483 7.47554 7.45623 7.45689 7.41753 7.39815 7.39815	2.9022 + 0 2.9609 3.0229 3.0823 3.1452 3.2754 3.2754 3.428 3.4118 3.4824	1.84581 + 4 1.88313 1.92131 1.96038 2.00037 2.04129 2.08317 2.12603 2.16991 2.21483	2.9610 - 6 2.9526 2.9443 2.9359 2.9276 2.9192 2.9109 2.9025 2.8857	7-27972 - 1 7-25921 7-23868 7-21815 7-19760 7-17704 7-15647 7-13590 7-11531 7-09470
24500 24500 244000 244500 247500 247500 248500 249000 249500	2479 13 248425 248937 249449 250473 250985 251497 252009 252521	925.34 923.92 922.5 921.1 919.6 918.2 916.8 915.3 913.9 912.4	8.8489 - 6. 8.8255 8.802 8.779 8.755 8.732 8.732 8.708 6.684 8.661 8.637	7.35930 - 1 7.33984 7.3208 7.3009 7.2813 7.2618 7.2422 7.2226 7.2029 7.1833	3.55%7 + 0 3.6287 3.705 3.762 3.862 3.862 4.026 4.112 4.199 4.289	2.26081 + 4 2.30789 2.3561 2.4055 2.4560 2.5078 2.5608 2.6151 2.6707 2.7277	2.8774 - 6 2.8690 2.8691 2.852 2.844 2.835 2.827 2.817 2.810 2.802	7.07409 - 1 7.05347 7.0328 7.0122 6.9915 6.9709 6.9502 6.9295 6.9088 6.8881
250000 250500 251500 251500 252500 252500 253500 253500 254500 254500	253034 253594 254058 254570 255083 255595 254107 254420 257132 257645	911.0 909.5 908.1 906.6 905.2 903.7 902.3 900.8 899.3	8.614 - 6 8.590 8.556 8.5542 8.519 8.495 8.471 8.447 8.423 8.599	7.1636 - 1 7.1439 7.1242 7.1044 7.0846 7.0648 7.0450 7.0251 7.0052 6.9853	4.381 + 0 5.475 4.571 4.670 4.771 4.875 4.981 5.090 5.202 5.316	2.7861 + 4 2.8459 2.9072 2.9070 3.0344 3.1004 3.1680 3.2373 3.3084 3.3812	2.793 - 6 2.7765 2.7768 2.768 2.760 2.751 2.783 2.734 2.726 2.717	6.8674 - 1 6.8456 6.8259 6.8051 6.7844 6.7636 6.7428 6.7220 6.7012 6.6804
255000 255500 255500 254500 257500 257500 258500 258500 258500	258157 258649 259182 259694 260207 260720 261232 261745 262257 262770	896.4 893.4 893.4 890.5 887.5 887.5 884.5 884.5	8.375 - 6 8.351 8.327 8.363 8.279 8.255 8.231 8.207 8.182 8.173	6.9654 - 1 6.9454 6.9254 6.9254 6.8854 6.8653 6.8452 6.8251 6.8259	5.434 + 0 5.554 5.678 5.804 5.934 6.067 6.204 6.344 6.488	3. k559 + 4 3.5325 3.6110 3.6916 3.7742 3.8589 3.9858 4.0349 4.1264 4.2370	2.709 - 6 2.700 2.692 2.683 2.675 2.656 2.658 2.649 2.641 2.638	6.6596 - 1 6.6387 6.6179 6.5970 6.5762 6.5538 6.5388 6.5135 6.4926 6.4888
260000 260500 261500 261500 262500 262500 263500 263500 264500 264500	263283 263794 264308 264821 265334 265847 266357 266357 266352 267385 267898	554.0 884.0 884.0 884.0 884.0 884.0 884.0	8.173 - 6 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173	6.797% - 1 - 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797%	6.857 + 0 7.057 7.264 7.476 7.405 7.919 8.151 8.389 8.635 8.887	4.3609 + 4 4.4884 4.6197 4.7547 4.8938 5.0369 5.1841 5.3357 5.4917 5.6523	2.638 - 6 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638	6.1848 - 1. 6.1848 6.1848 6.1848 6.1848 6.1848 6.1848 6.1848 6.1848
265000 265500 265500 264000 267000 267500 268000 268000 269500	2484 11 248921 249437 249950 270443 270974 2711489 272002 2725 16 273029	884.0 884.0 884.0 884.0 884.0 884.0 884.0	8.173 - 6 8.173 8.173 6.173 6.173 8.173 8.173 8.173 8.173 8.173	6.7974 - 1 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974	9.147 + 0 9.415 9.690 9.973 1.026 + 1 1.056 1.087 1.119 1.152 1.186	5.8176 + 4 5.9877 6.1628 6.3430 6.5285 6.7194 6.9158 7.1180 7.3262 7.5404	2.638 - 6 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638	6.4848 - 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848

TABLE VI.—Concluded
GEOMETRIC ALTITUDE, ENGLISH UNITS

GEOMETRIC ALTITUDE, ENGLISH UNITS							<u> </u>	
Altii	rude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal c	onductivity
Z, ft	H, ft	C _s , ft sec ⁻¹	μ , lb ft sec sec μ	$\frac{\mu_{c}}{\mu_{0}}$	η , ft 2 sec $^{-1}$	$\frac{\eta}{\eta_0}$	k, Břu ff ^{-l} sec ^{-l} (9R) ^{-l}	k k ₀
230000 230500 231000 231000 232000 232000 233000 233000 234000 234500	227491 227980 228469 228958 2299447 229936 230425 230914 231892	973.96 972.64 971.31 969.98 968.65 967.32 965.99 964.65 963.31	9.6502 6 9.6282 9.6063 9.5893 9.5893 9.5403 9.5103 9.4962 9.4741 9.4520	8.02570 - 1 8.00747 7.98921 7.97094 7.97265 7.93433 7.91400 7.89764 7.87926 7.86086	1.7908 + 0 1.8238 1.8575 1.9919 1.9270 1.9629 1.9629 2.0370 2.0752 2.1143	J.13896 + 4 1.15994 1.18138 1.20326 1.22561 1.24843 1.27175 1.29555 1.31987 1.34471	3. 1682 - 6 3. 1602 3. 1521 3. 1441 3. 1360 3. 1280 3. 1199 3. 1118 3. 1037 5. 0956	7-78926 - 1 7-76947 7-74967 7-71986 7-71004 7-69021 7-67037 7-65052 7-63066 7-61079
235000 235500 236500 236500 237500 237500 238500 238500 239500 239500	232381 232870 233359 233848 234337 234825 235314 235803 236292 236780	960.63 959.29 957.94 956.60 955.25 953.90 952.55 951.19 949.84 948.48	9.4298 - 6 9.4076 9.3854 9.3632 9.3410 9.3187 9.2968 9.2741 9.2517 9.2293	7.84245 - 4 7.82401 7.80554 7.768766 7.75856 7.75003 7.73149 7.71292 7.699433 7.67572	2.1542 + 0 2.1950 2.2566 2.2792 2.3226 2.3671 2.4125 2.4589 2.5063 2.5547	1.37C09 + 4 -1.37602 1.42250 1.44957 1.47722 1.50547 1.53435 1.56385 1.56385 1.56386	3.0876 - 6 3.0795 3.0714 3.0633 3.0552 3.0471 3.0390 3.0308 3.0227 3.0146	7.59091 - 1 7.57102 7.55111 7.53120 7.51128 7.49135 7.47142 7.45147 7.43151 7.41154
240000 240500 241000 241500 242000 242500 243500 243500 243500 244500	237269 237758 238246 238735 239224 239712 240201 240689 241178 241666	947.12 945.76 944.39 943.03 941.66 940.29 938.92 937.55 936.17	9.2069 - 6 9.1845 9.1621 9.1396 9.1171 9.0945 9.0720 9.0494 9.0268 9.0041	7.65709 - 1 7.63843 7.61976 7.60106 7.56234 7.56360 7.54484 7.52605 7.50725 7.48842	2.60h3 + 0 2.65h9 2.7067 2.7596 2.8137 2.8690 2.9256 2.9834 3.0426 3.1031	1.6563% + % 1.68855 1.721%7 1.75513 1.7895% 1.82472 1.86070 1.89749 1.93511 1.97359	3.0065 - 6 2.9983 2.9902 2.9821 2.9739 2.9576 2.9576 2.9495 2.9413 2.9332	7.39156 - 1 7.37157 7.35157 7.33156 7.31155 7.29152 7.27148 7.25143 7.23138 7.21131
245000 245500 246500 246500 247000 247500 248000 248500 249500	242155 242643 243132 243629 244108 244597 245085 245573 246062 246550	933.42 932.04 930.7 929.3 927.9 926.5 925.1 923.7 922.3 920.9	6.9015 - 5 8.958 8.936 8.913 8.891 8.868 8.845 8.822 8.799 8.776	7.45957 - 1 7.45069 7.4318 7.4129 7.3939 7.3750 7.3560 7.3370 7.3180 7.2989	3.1650 ± 0 3.2282 3.293 3.359 3.427 3.496 3.567 3.640 3.714 3.790	2.01294 + 4 2.05319 2.0944 2.1365 2.1796 - 2.2236 2.2368 2.3149 2.3149 2.3621 2.4105	2-9250 - 6 2-9168 2-909 2-900 2-892 2-884 2-876 2-868 2-860 2-851	7.19124 - 1 7.17115 7.1511 7.1310 7.1108 7.0907 7.0706 7.0504 7.0303 7.0101
250000 250500 251500 251500 252000 252500 253000 253500 254500	247038 247526 248015 248503 248991 249479 249967 250455 250443	919.5 918.1 916.7 915.3 913.9 912.5 911.1 909.7 908.2	8.753 - 6 8.730 8.707 8.684 8.661 8.638 8.615 8.552 8.5569 8.5569	7.2798 - 1 7.2416 7.225 7.2033 7.1841 7.1649 7.1457 7.1457 7.1457	3.868 + 0 3.9%7 4.029 4.112 4.198 6.285 8.375 4.866 4.560	2.4599 + 4 2.5106 2.5624 2.6697 2.7253 2.7822 2.8405 2.9002 2.9613	2.843 - 6 2.835 2.827 2.818 2.810 2.802 2.794 2.786 2.777 2.769	6-9900 - 1 6-9698 6-9496 6-9294 6-9092 6-8890 6-8687 6-8485 6-8080
255000 255500 256000 256500 257500 257500 258000 258500 259000 259500	251919 252407 252895 253383 253871 254359 254847 255335 255822 256310	905.4 904.0 902.6 901.1 899.7 898.3 896.8 895.4 894.0 892.5	8.522 6 8.499 8.476 8.453 8.429 8.406 6.383 8.359 8.336	7.0878 - 1 7.0685 7.0491 7.0298 7.0104 6.9909 6.9715 6.9525 6.9130	4.755 + 0 4.855 4.959 5.064 5.173 5.28k 5.397 5.514 5.633 5.756	3.0239 + 4 3.0880 3.1537 3.2210 3.2899 3.3605 3.4328 3.5070 3.5070 3.5829 3.6608	2.761 - 6 2.753 2.744 2.736 2.728 2.720 2.711 2.703 2.695	6-7377 - 1. 6-7675 6-7472 6-7269 6-7066 6-6863 6-6660 6-6456 6-6253 6-6049
260000 260500 261000 261500 262500 262500 263500 264500 264500	256798 257286 257774 258261 258749 259237 259724 260212 260699 261187	891.1 869.6 888.2 866.7 885.3 884.0 884.0 884.0	8.289 - 6 8.265 8.242 8.218 8.194 8.173 8.173 8.173 8.173 8.173	6.8935 - 1 6.8739 6.85543 6.8347 6.8151 6.7974 6.7974 6.7974 6.7974	5.881 + 0 6.010 6.142 6.277 6.415 6.561 6.749 6.941 7.139 7.342	3.7406 + 4 3.8223 3.9062 3.9021 4.0802 4.1732 4.2021 4.4145 4.5403	2.670 2.662 2.653 2.645 2.645 2.638 2.638 2.638 2.638	6.5846 — 1 6.5642 6.55439 6.5235 6.5031 6.8848 6.4848 6.4848 6.4848
265000 265500 266000 266500 267500 267500 268500 268500 269500	261675 262162 262650 263137 263624 264112 264599 265574 26561	884.0 884.0 884.0 884.0 884.0 884.0 884.0	8.173 - 6 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173	6.797% - 1 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797%	7.551 + 0 7.767 7.988 8.216 8.450 8.450 8.691 8.938 9.193 9.193 9.455 9.724	4.8028 + 4 4.9397 5.0805 5.2252 5.3714 5.5273 5.6848 5.8467 6.0133 6.1846	2.638 - 6 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638	6.4848 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848
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TABLE VI.—Concluded
GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

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Altii	ude	Sound speed	Coefficient	of viscosity	Kinematic	viscosity	Thermal o	onductivity
H, ft	Z, ft	C _s ,	μ, lb ff sec	$\frac{\mu}{\mu_0}$	η, ft² sec⁻'	$\frac{\eta}{\eta_0}$	k, BTUft ^{-l} sec ^{-l} (°R) ^{-l}	<u>k</u> .k _o
270000 270500 271000 271500 272000 272500 273500 273500 274500 274500	273542 274055 274568 275082 275595 276108 276622 277135 277648 278162	884.0 884.0 884.0 884.0 884.0 884.0 884.0	8.173 - 6 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173	6.797h - 1 6.797h 6.797h 6.797h 6.797h 6.797h 6.797h 6.797h 6.797h	1.220 + 1 1.256 1.293 1.330 1.369 1.409 1.451 1.453 1.537	7.7609 + 4 7.9818 8.2214 8.4618 8.7092 8.9638 9.2260 9.4957 9.7734 1.0059 + 5	2.638 - 6 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638	5.4848 - 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848
275000 275500 276000 276500 277500 277500 278000 278500 279500	278675 279189 279702 280216 280729 281243 281756 282270 282784 283297	884.0 884.0 884.0 884.0 884.0 884.0 884.0	8.173 - 6 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173	6.7974 - 1 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974	1.628 + 1 1.675 1.724 1.775 1.827 1.880 1.935 1.992 2.050 2.110	1.0353 + 5 1.0656 1.0968 1.1288 1.1618 1.1958 1.2308 1.2668 1.3038 1.3419	2.638 - 6.2 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638	6.4848 - 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848
280000 280500 281000 281500 282500 282500 283500 284500 284500	283811 284325 284838 285352 285366 286380 286894 287408 287921 288435	884.0 884.0 884.0 864.0 864.0 884.0 884.0	8.173 - 6 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173	6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974	2.172 + 1 2.235 2.300 2.368 2.37 2.508 2.582 2.657 2.735 2.815	1.3812 + 5 1.4215 1.4631 1.5059 1.5499 1.5499 1.6419 1.6899 1.7393 1.7702	2.638 - 6 : 2.638 - 2.638 - 2.638 - 2.638 - 2.638 - 2.638 - 2.638 - 2.638 - 2.638 - 2.638 - 2.638	6.4848 - 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848
285000 285500 286000 286500 287500 287500 288500 288500 289500	288949 289463 289977 290491 291005 291519 292053 292548 293062 293576	884.0 884.0 884.0 884.0 884.0 884.0 884.0	8.173 - 6 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173	6-797% - 1 6-797% 6-797% 6-797% 6-797% 6-797% 6-797% 6-797% 6-797%	2.897 + 1 2.982 3.069 3.159 3.251 3.346 3.444 3.555 3.648 3.755	1.8425 + 5 1.8964 1.9518 2.0089 2.0677 2.1281 2.1903 2.2544 2.3203 2.3882	2.638 - 6 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638	6.4848 - 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848
290000 290500 291000 291500 292500 292500 293500 293500 294500 294500	294090 294604 295119 295633 296147 296661 297176 297690 298204 298719	884.0 884.0 884.8 885.9 887.1 886.2 889.4 890.5	8.173 - 6 8.173 8.173 8.186 8.205 8.223 8.242 8.240 8.249 8.279	6.797% - 1 6.797% 6.8082 6.8236 6.8391 6.85%5 6.8699 6.8853 6.9007	3.865 + 1 3.978 4.004 4.228 4.372 4.521 4.675 4.833 4.997 5.165	2.4580 + 5 2.5299 2.6038 2.6890 2.7809 2.8756 2.9734 3.0781 3.1781 3.2852	2.638 - 6 2.638 2.638 2.642 2.649 2.655 2.665 2.668 2.475	6.4848 - 1 6.4848 6.4848 6.4959 6.5120 6.5280 6.5441 6.5601 6.5761 6.5921
295000 295500 296000 296500 297500 297500 298500 298500 299500	299233 299748 300262 300777 301291 301806 302321 302835 303350 303864	892.8 893.9 895.1 896.2 897.4 898.5 899.6 900.7 901.9 903.0	8.316 - 6 8.334 8.353 8.371 6.390 8.408 6.426 8.445 8.463 8.463	6.9161 - 1 6.9314 6.9468 6.9621 6.9774 6.9926 7.0079 7.0231 7.0383 7.0535	5.339 + 1 5.518 5.703 5.893 6.089 6.291 6.499 6.714 6.935 7.163	3.3957 + 5 3.5095 3.6269 3.7479 3.8726 4.0011 4.1335 4.2700 4.4106 4.5554	2.688 - 6 2.694 - 2.701 2.707 2.714 2.720 2.727 2.727 2.733 2.740 2.746	6.6082 - 1 6.6242 6.6401 6.6561 6.6721 6.6881 6.7040 6.7200 6.7359 6.7518
300000	304379	904.1	8.499 - 6	7.0687 - 1	7.397 + 1	4.7046 + 5	2.753 - 6	6.7677 - 1

TABLE VI.—Continued
GEOMETRIC ALTITUDE, ENGLISH UNITS

Altit	huda :	Sound	 		viscosity Kinematic viscosity Thermal conduc				
A''''	principle	speed	Goermoiem		Killenialio			onductivity.	
Z, ft	H, ft	C _s ,	μ , lb ff sec $^-$	$\frac{\mu}{\mu_0}$	η, ft² sec-'	$\frac{\eta}{\eta_0}$	k, BTU ft ^{-l} sec ^{-l} (°R) ^{-l}	k k _O	
270000 270500 271000 271500 272500 272500 273500 273500 274500 274500	266549 267036 267523 268010 268498 268985 269472 269959 270446 270933	884.0 884.0 884.0 884.0 884.0 884.0 884.0	8.173 - 6 8.173 8.173 8.173 8.173 6.173 8.173 8.173 8.173 8.173	6.7974 - 1 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974	1.000 + 1 1.029 1.058 1.088 1.119 1.151 1.184 1.217 1.252 1.288	6.3608 + 4 6:54283 6.9200 7:1-17: 7.3198 7.5282 7.7426 7.9631 8.1899	2.638 - 6 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638	6.4848 - 1. 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848	
275000 275500 276000 276500 277500 277500 278500 278500 279500	271420 271908 272395 272882 273369 273856 274342 274829 275316 275803	884.0 884.0 884.0 884.0 884.0 884.0 884.0	8.173 - 6 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173	6.797% = 1 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797%	1.324 + 1 1.362 1.401 1.481 1.482 1.524 1.567 1.612 1.658 1.705	8-4231 + 4 8-6429 8-9095 9-1632 9-4240 9-6923 9-9682 1-0252 + 5 1-0544	2-638 - 6 2-638 2-638 2-638 2-638 2-638 2-638 2-638 2-638 2-638	0.4848 - 1 0.4848 0.4848 0.4848 0.4848 0.4848 0.4848 0.4848 0.4848	
280000 280500 281000 281500 282000 282500 283500 284000 284500	276290 276777 277264 277750 278237 278237 278724 279211 279697 280184	884.0 884.0 884.0 884.0 884.0 884.0 884.0	8.173 - 6. 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173	6.7974 - 1 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974	1.754 + 1 1.805 1.855 1.908 1.962 2.018 2.075 2.134 2.195 2.257	1-1152 + 5 1-1470 1-1796 1-2132 1-2477 1-2832 1-3197 1-3573 1-3959 1-4356	2.638 - 6 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638	6.4848 - 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848	
285000 285500 284500 284500 287500 287500 288500 289500 289500	281 157 281 644 282 130 282 617 283 103 283 590 284 076 284 563 285 049 285 536	884.0 884.0 884.0 884.0 884.0 884.0 884.0 884.0	8.173 - 6 8.173 8.173 8.173 8.173 8.173 8.173 8.173 8.173	6.797% - 2 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797% 6.797%	2.321 + 1 2.387 2.455 2.525 2.597 2.671 2.747 2.825 2.905 2.988	1.4764 + 5 1.5184 1.5616 1.6060 1.6517 1.6987 1.7470 1.7967 1.8478 1.9003	2.638 - 6 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638 2.638	6.4848 - 1 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848 6.4848	
290000 290500 291000 291500 292500 292500 293500 293500 294500 294500	286022 286509 286995 287481 287967 288454 288454 289426 289426 289912 290399	584.0 684.0 684.0 884.0 884.0 884.0 884.0	8.173 - 6 8.173 8.173 8.173 6.173 8.173 8.173 8.173 8.173	6.7974 - 1 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974 6.7974	3.073 + 1 3.160 3.250 3.342 3.437 3.535 3.636 3.739 3.845 3.955	1.9543 + 5 2.0099 2.0670 2.1258 2.1862 2.2484 2.3123 2.3780 2.4856 2.5151	2.638 - 6: 2.638: 2.638 2.638 2.638 2.638 2.638 2.638 2.638	6.4848 - 1 6.4846 6.4846 6.4846 6.4846 6.4848 6.4848 6.4848 6.4848	
295000 295500 296000 296500 297500 297500 298500 298500 299500	290885 291371 291357 292343 292829 293315 293801 294287 294773 295259	884.5 885.6 886.7 887.8 889.0 890.1 891.2 392.3	8.173 - 6 8.181 8.199 8.218 8.236 8.254 8.272 8.290 8.308 6.326	6.7974 - 1 6.80%2 6.8192 6.83%2 6.8492 6.86%2 6.0792 6.89%2 6.9091 6.92%0	4.067 + 8 4.191 4.331 4.074 4.622 4.774 4.931 5.093 5.260 5.431	2.5866 + 5 2.6657 2.7543 2.8456 2.9396 3.0365 3.1364 3.2392 3.3457 3.4583	2.638 - 6 2.641 2.647 2.653 2.666 2.672 2.672 2.678 2.685 2.691	6.4848 - 1 6.4918 6.5074 6.5230 6.5386 6.5542 6.5698 6.5853 6.6009 6.6164	
300000	295745	894.5	8.343 - 6	6.9389 - 1	5.608 + 1	3- <u>566</u> 4 + 5	2.698 - 6	6.6320 - 1	

Table VII
GEOPOTENTIAL ALTITUDE IN METERS AS A FUNCTION OF PRESSURE IN MILLIBARS

668502. O:= 63:= 16

TABLE VII

P, mb	0.00	Ó.0 J	0.02	Q.Q3	0.04	0.05	0.06	0.07	.O.,08.	0:09
5.60 8.70 8.80 8.90	31985 31908 31833	31977 31901 31825	31969 31893 31818	31962 31885 31810	31954 31878 31803	31 946 31 870 31 795	31939 31863 31788	31931 31855 31780	32000 31923 31848 31773	31992 31916 31840 31765
9.10 9.20 9.30 9.50 9.50 9.60 9.60	31758 31611 31611 31539 31467 31327 31327 31328 31189	31751 31677 31604 31532 31460 31390 31320 31251 31182	31743 31669 31597 31524 31453 31383 31284 31176	31736 31662 31589 31517 31446 31376 31237 31169	31728 31555 31582 31510 31439 31369 31230 31165	31721- 31647 31575 31503 31432 31262 31262 31263 31168	31714 31640 31568 31495 31355 31285 31217 31149 31081	31706 31633 315630 31489 31418 31348 31278 31210 31142 31075	31699 31626 31553 31482 31411 31341 31271 31271 31203 31135 31068	31691 31618 31546 31474 31474 31334 31265 31196 31128 31061

P, mb	ဝ ဝုဂ္ဂ	0.04	0.02	0.03	0.Q 4	0.05	0.06	0.07	0.08	0.09
10.00 10.10 10.20 10.30 10.40 10.50 10.60 10.70 10.80 10.90	31055 30988 30923 30858 30793 30793 30667 30664 30542 30481	31048 30982 30916 30851 30787 30723 30660 30598 30536 30475	31041 30975 30910 30845 30781 30717 30654 30592 30530 30469	31035 30969 30903 30838 30774 30711 30648 30585 30524 30463	31028 30962 30897 30832 30768 30704 30642 30579 30518 30457	31021 30955 30895 30825 30761 30698 30635 30573 30512 30451	31015 310949 30884 30819 30755 30692 30629 30567 30567 30505	31 008 30942 30877 30813 30749 30685 30623 30551 30499 30438	31,002 30936 30871 30806 30742 30679 30617 30555 30493 30432	30995 30929 30864 30860 30736 30673 30610 20542 30487 30426
11.00 11.10 11.20 11.30 11.40 11.50 11.60 11.60 11.70	30420 30360 30300 30241 30183 30125 30067 30011 29954 29898	30414 30354 30295 302377 30119 30062 30062 30948 29893	30408 30348 30289 30230 30171 30113 30056 29999 29887	30402 30342 30283 30284 30165 30108 30050 29994 29937 29881	30396 30336 30277 30218 30160 30162 30045 29988 29932	30390 30330 30271 30271 30154 30096 30039 29982 29926 29870	30384 30324 30265 30266 30148 30090 30090 29977 299720 29865	30378 30318 30259 30250 30142 30085 30028 29971 29915 29859	30372 30312 30253 30195 30197 30072 29965 29965 29854	30366 30306 30247 30189 30131 30073 30016 29960 29904 29848
12.00 12.10 12.20 12.30 12.40 12.50 12.60 12.60 12.80	29843 29788 29733 29679 29625 29572 29519 29467 29467 29364	29837 29782 29728 29674 29667 29567 29514 29460 29359	29832 29777 29722 29668 29665 29562 29562 29557 29455 29353	29826 29771 29717 29763 29669 29556 29564 29551 29400 29348	29821- 29766 297117 29604 29551 29498 29496 29395 29343	29815 29760 29765 29765 29599 29546 29441 29389 29338	29810 29755 29761 297647 29593 29540 29548 29436 29436 29333	29804 29749 29749 29641 29588 29535 29535 29431 29431 29379	29799 29744 29690 29636 29583 29530 29477 29426 29374 29323	29793 29739 29684 29631 29577 29525 29472 29420 29369 29318
13.00 13.10 13.20 13.30 13.40 13.50 13.60 13.70 13.80 13.80	29313 29262 29212 29162 29162 29163 29014 28966 28918 28870	29308 29257 29257 292157 299107 299009 28991 28981 20966	29352 29352 29202 29152 29153 29005 28958 28861	29297 29247 29247 29147 29048 29048 29952 28952 28856	29292 29242 29192 29192 29193 29094 28995 28947 28899 28851	29287 29237 29237 29137 29137 29039 28990 28990 28944 23824 28847	29282 292182 29132 29132 290034 28985 28985 28985 288842	29277 29227 29177 29127 29078 29029 28980 28932 28885 28837	29272 29222 29172 29172 29073 29024 28976 28928 28880 28832	29267 292167 29167 29117 29068 29019 28971 28923 28875 28828
14.00 14.10 14.20 14.30 14.40 14.50 14.50 14.70 14.80	28823 28776 28729 28683 28637 28591 28346 28501 28456 28412	28818 28771 287725 28673 28584 28584 28497 28497 28458	28814 28767 28720 28678 2852 28537 28537 28446 28403	28809 28762 28715 28669 28623 28578 28533 26543 263499	28804 28757 2871 28665 28619 28573 28528 28483 28483 28439 28394	28799 28753 28706 28660 28614 28524 28524 28479 28439	28795 28748 28702 28655 28610 28519 28419 28430 28386	28790 287437 28677 28651 28605 28560 28515 28470 28425 28425	28785 28739 28692 28646 28601 28555 28510 28465 28421 28377	28781 28734 28648 28642 28596 285506 28401 28417 28372
15.00 15.10 15.20 15.20 15.40 15.50 15.60 15.70 15.80 15.90	28368 28324 28281 28238 28195 28152 28110 28068 28026 27985	28364 28327 28277 28233 28191 28148 28106 28064 28064 28022 27980	28359 28316 28279 281286 28144 28101 28059 2817976	28355 28311. 28268 28225 28182 28139 28097 28055 28014 27972	28351 28307 28264 28220 28178 28135 28093 28051 28059 27968	28346 28303 28259 28216 28173 28173 28089 28047 28047 28045 27964	28342 28298 28295 28212 28169 28127 28085 28043 28001 27960	28337 28294 28251 28208 28165 28123 28080 28039 27997 27956	28333 28290 28246 28203 28161 28118 28076 28034 27993 27952	28329 28285 28285 28199 28156 28114 28030 27989 27947
16.00 16.10 16.20 16.30 16.40 16.50 16.60 16.70 16.80 16.90	27943 27902 27862 27862 27781 27741 27701 27662 27623 27584	27939 27898 27858 27857 27777 27737 27738 27658 27659 27610	27935 27894 27854 27853 27733 27733 27694 27654 27615 27576	27931 27890 27850 27869 27769 27769 27650 27650 27611 27572	27927 27886 27886 27805 27765 27765 27686 27667 27568	27923 27882 27861 27761 27761 27682 27642 27663 27565	27919 27878 27837 27837 27757 27767 27678 27639 27599 27561	27915 27874 27833 277753 277753 27713 27674 27635 27596 27557	27911 27870 27829 27789 27749 27769 27670 27631 27592 27553	27907 27865 27825 27785 27745 27765 27666 27627 27588 27549
17.00 17.10 17.20 17.30 17.40 17.50 17.60 17.80 17.90	27545 27507 27468 27430 27393 27355 27318 27281 27284 27207	27541 27503 27465 27427 27389 27351 27314 27277 27240 27203	27537 27499 27461 27423 27385 27348 27310 27273 27236 27200	27534 27495 27457 27419 27381 27344 27307 27269 27233 27196	27530 27491 27453 27415 27378 27340 27363 27229 27192	27526 27449 27411 27374 27336 27299 27265 27255 27189	27522 27484 27446 27408 27333 27295 27295 27222 27185	27518 27480 27442 27404 27366 27329 27292 27255 27218	27514 27476 27438 27400 27363 27328 273288 27251 27214 27178	2751 F 27474 27434 27396 27359 27351 27284 27247 2721 L 27174
18.00 18.10 18.20 18.30 18.40 18.50 18.60 18.60 18.80	27170 27134 27098 27062 27026 26991 26956 26921 26886 26881	27167 27130 27094 27059 27023 26987 26952 26917 26882 26848	27163 27127 27091 27055 27019 26984 26949 26914 26879 26844	27159 27123 27087 27051 27016 26980 26945 26910 26841	27156 27120 27084 27042 27012 26977 26942 26907 26872 26837	27152 27116 27080 27044 217097 26938 26938 26968 26868 26834	27149 27116 27076 27041 27005 26970 26935 26935 26865 26830	27145 271073 27073 27037 27002 26966 26931 26896 26861 26827	27141 27105 27069 27034 26998 26968 26928 26893 26858 26823	27138 27106 27106 27030 26995 26959 26959 26854 26820
19.00 19.10 19.20 19.30 19.40 19.50 19.60 19.80 19.80	26816 26782 26748 26748 26640 26647 25580 26547 26547 26514	26813 26779 26745 26745 26677 26643 26610 26577 26544 26511	26810 26775 26741 26707 26673 26640 26607 26573 26540 26507	26806 26772 26738 26704 26670 26637 26503 26570 26537 26504	26803 26768 26734 26700 26667 26633 26600 26567 26534 26501	26799 26765 26731 26697 2663 26630 26597 26533 26530 26498	26796 26762 26728 26694 2660 26627 26593 26560 26527 265494	26792 26758 26758 26690 26657 26623 26590 26557 26524 26491	26789 26755 26755 26687 26653 26587 26587 26553 26553 26488	26786 26751 26751 26684 26650 26617 26583 26550 265484

P, mb	0.0	0.1	0.2	G.3	0.4	0.5	0.6	0.7	08	0.9
20.00 20.00	26481 26163 25860 25570 25299 25029 24774 24530 24294 24294	26449 26132 25830 25542 25267 25003 24749 24506 24271 24045	26416 26101 25801 25514 25240 25240 24777 24725 24482 24482 24023	26384 26070 25771 25486 25213 24951 24700 24458 24225 24001	26040 257458 25458 25458 25458 25458 25458 24926 24926 24675 24435 24203 23979	26320 26009 25713 25430 25430 24900 24451 24411 24180 23957	26288 25979 25684 25403 25403 24875 24626 24387 24157 23935	26257 25949 25656 25375 25107 24849 24602 24364 24135 23914	26225 25919 25627 25348 25081 24824 24578 24341 24112 23892	26194 25889 25321 25321 25055 24799 24554 24318 24090 23870
30.0 31.0 32.0 33.0 33.0 35.0 35.0 35.0 35.0	23849 23637 23432 23234 23042 23856 22675 22499 22162	23827 23616 23412 23215 23023 22838 22657 22482 22481 22145	23806 23596 23592 23195 23195 22819 22639 22465 22295 22129	23784 23575 23372 23176 22966 22801 22622 22447 22278 22113	23763 23554 23355 23157 22967 22783 22604 22430 22261 22096	23742 23534 23533 23138 221948 22765 222541 22244 22260	23721 23514 23313 23118 22930 22747 22569 22396 22228 22064	23700 23493 23293 23099 22911 22729 22551 22379 22211 22048	23679 23473 23273 23080 22893 22711 22362 22362 22362 22362	23658 23453 23254 23061 22674 22693 22517 22345 22178 22016
40.0 41.0 42.0 43.0 44.0 45.0 46.0 47.0 48.0	22000 21842 21688 21537 21397 21247 21107 20970 20836 20705	21984 21826 21672 21522 21376 21233 21093 20956 20853 20692	21968 21811 21657 21508 21562 21219 21079 20943 20943 20679	21952 21795 21642 214947 21205 21966 20929 20796 20666	21936 21780 21627 21478 21478 21478 21191 21091 20916 20783 20653	21920 21754 21612 21463 21318 21177 21038 20903 20770 20640	21904 21749 21449 21304 211024 20889 20757	21889 21733 21582 21434 21290 21149 21011 20876 20744 20614	21873 21718 21718 21420 21426 21135 20927 20862 20731 20602	21857 21703 21552 21405 21261 21221 20849 20716 20589
00000000000000000000000000000000000000	20576 20450 20327 20206 20087 19971 19857 19744 19526	20563 20438 20315 20315 20194 20076 19959 19845 19733 19623 19515	20551 20425 20303 20182 20964 19948 19834 19722 19612 19504	20538 20413 20290 20170 20052 19936 19823 19711 19601	20525 20401 20278 20158 20158 20041 19925 19812 19700 19591 19483	20513 20388 20266 20146 20029 19914 19889 19580 19580	20500 20376 20274 20135 2017 19902 19789 19569 19569	20488 20364 20242 20123 20006 19891 19667 19558 19451	20475 20351 20230 20111 19994 19879 198656 19547	20463 20339 20318 20099 19982 19868 19756 19645 19537 19430
60.0 61.0 63.0 63.0 65.0 65.0 65.0 65.0 68.0	19419 19314 19211 19110 19010 18912 18815 18719 18625 18533	19409 19304 19201 19100 19000 - 18902 18805 18710 18616 18524	19398 19294 19191 19090 18990 18892 18796 18700 18607 18514	19388 19283 19181 19080 18980 18882 15786 18691 18598	19377 19273 19170 19070 18970 18873 18776 18682 18588 18496	19367 19263 19160 19060 18961 18863 18767 18672 18579 18487	19356 19252 19150 19050 18951 18853 18757 18663 18570 18478	19346 19242 19140 19040 18941 18844 18748 18653 18560 18469	19335 19232 19130 19030 18931 18834 18738 18644 18551	19325 19221 19120 19020 18921 18824 18729 18635 18542
70.0 71.0 72.0 73.0 74.0 75.0 76.0 77.0 78.0	18442 18352 18263 18175 18089 18004 17920 17837 17755 17675	18433 18343 18254 18167 18081 17996 17912 17829 17767	18424 18334 18245 18158 18072 17987 17903 17821 17821 17659	18414 18325 18237 18149 18064 17979 17895 17813 17731 17651	18405 16316 18228 18141 18055 17970 17887 17887 17804 17723 17643	18396 18307 18219 18132 18046 17962 17878 17775 17715	18387 18298 18210 18124 18038 17954 17670 17787 17627	18378 18289 18202 18115 18029 17945 17862 17780 17699 17619	18370 18281 18193 18106 18021 17937 17854 17772 17691	18361 18272 18184 18098 18013 17928 17945 17763 17663 17663
80.0 81.0 82.0 83.0 85.0 85.0 85.0 86.0	17595 17516 17438 17361 17285 17210 17136 17063 16919	17587 17508 17430 17354 17278 17203 17129 17056 16983 16912	17579 17500 17423 17346 17370 17195 17121 17048 16976 16904	17571 17493 17415 17338 17363 17188 17114 17041 16969 16897	17563 17485 17407 17331 17255 17181 17107 17104 16962 16890	17555 17477 17400 17323 17248 17173 17099 17027 16954 16863	17547 17469 17392 17316 17240 17166 17092 17019 16947 16876	17540 17461 17364 17308 17233 17158 17085 17012 16940 16869	17532 17454 17377 17301 17225 17151 17007 17005 16933 16862	17524 17446 174369 17293 17218 17144 17070 16998 16926 16855
90.0 91.0 92.0 93.0 93.0 95.0 96.0 97.0	16848 16778 16708 16640 16505 16505 16439 16373 16308	16841 16771 16702 16633 16565 16498 16432 16366 16301 16237	16834 16764 16695 16626 16559 16492 16425 16325 16231	16827 16757 16686 16652 16485 16485 16435 16435 16288 16224	16820 16750 16681 16613 16545 16478 16478 16282 16282	16813 16743 16674 16606 16538 16472 16406 16340 16276	16806 16736 16667 16599 165399 163399 16339 16369	16799 16729 16529 16592 16525 16458 16327 16263 16199	16792 16782 16586 16586 16518 16452 16386 16321 16256 16192	16785 16715 16647 16579 16512 16445 16379 16314 16250
100.0 101.0 102.0 103.0 103.0 105.0 106.0 107.0	16180 16117 16054 15992 15930 15810 15810 15751 15692 15633	16173 16110 16048 15986 15986 15864 15804 15745 15686 15627	16167 16104 16042 15900 15919 15858 15798 15780 15680 15622	16161 16098 16036 15974 15913 15852 15792 15733 15674 15616	16154 16092 16029 15968 15967 15846 15786 15786	16148 16085 16025 15962 15901 15840- 15781 15662 15604	16142 16079 16017 15955 15895 15834 15715 15715 15657	16135 16073 16011 15949 15888 15828 15768 15769 15651 15593	16129 16067 16005 15943 15882 1582 15763 15703 15645 15587	16123 16069 15998 15937 15876 15816 15698 15639 15581
110.0 111.0 112.0 113.0 114.0 115.0 116.0 116.0	15575 15516 15516 15461 15405 15349 15293 15238 15130 15130	15570 15512 15433 15343 15343 15288 15233 15179 15125 13071	15504 15506 15450 15393 15338 15262 15282 15283 15119 15066	15558 15501 15344 15380 15332 15277 15222 15168 15114 15061	15552 15495 15495 15382 15327 15271 152 17 15162 15169 15055	15547 15489 15437 15377 15321 15321 15266 15157 15150 15050	15541 19484 15371 15315 15206 15206 15152 15098	15535 15478 15422 15365 15310 15255 15200 15146 15039	15529 15416 15300 15300 15309 15349 15141 15034	15524 15410 15304 15304 15304 15189 15189 15189 15189

P, mb	0.0	0.1	0.2	Ò.3	0.4	0.5	0.6	0.7	0.8	0,9
120.0 121.0 122.0 123.0 124.0 125.0 125.0 126.0 127.0 128.0	15023 14971 14919 14867 14816 14765 14714 14664 14614 14565	15018 14966 14913 14862 14810 14760 14769 14659 14669 14560	15013 14960 14908 14857 14855 14754 14704 14654 14604 14555	15008 14955 14903 14851 14850 14749 14699 14699 14550	15002 14950 14898 14846 14795 14744 14694 14694 14594 14545	14997 14945 14893 14893 14790 14739 14689 14689 14589 14589	14992 14940 14888 14836 14785 14734 14684 14684 14585 14535	14987 14934 14882 14831 14780 14729 14629 14629 14580 14531	14981 14929 14877 14826 14775 14724 14674 14624 14575 14526	14976 14924 14872 14871 14770 14719 14669 14619 14570
130.0 131.0 132.0 133.0 134.0 135.0 136.0 137.0 138.0 139.0	14516 14467 14419 14371 14324 14277 14230 14183 14137 14091	14511 14462 14414 14466 14319 14272 14275 14179 14133 14087	14506 14458 14458 14362 14314 14267 1427 14274 14128 14082	1450 1 14453 144557 1431 0 14262 142169 14169 14123 14078	14496 14448 14452 14352 14355 14258 14211 14165 14119 14073	14492 14443 14347 14347 14300 14253 14256 14160 14114	14487 14438 14390 14343 14295 14248 14266 14110	14482 14434 14386 14338 14291 14244 14197 14151 14105	14477 34429 14333 14286 14239 14146 14101 14055	14472 14424 14376 14328 14281 14234 14188 14142 14096 14050
140.0 141.0 142.0 143.0 144.0 145.0 146.0 147.0 148.0 149.0	14046 14001 13956 13911 13867 13823 13780 13737 13694 13651	14041 13996 13952 13907 13863 13819 13775 13732 13689 13647	14037 13992 13947 13903 13858 13815 13771 13728 13685 13642	14032 13987 13943 13898 13854 13810 13767 13764 13681 13688	14028 13983 13938 13894 13850 13806 13762 13719 13676	14023 13978 13934 13889 13845 13802 13758 13715 13672 13630	14019 13974 13929 13885 13841 13797 13754 13711 13668	14014 13969 13925 13881 13637 13793 13749 13706 13664 13621	14010 13965 13920 13876 13632 13789 13745 13702 13659 13617	14005 13960 13916 13872 13828 13784 13741 13698 13655 13613
150.0 151.0 152.0 153.0 155.0 156.0 156.0 157.0 158.0	13608 13566 13524 13483 13442 134400 13360 13319 13279 13239	13604 13562 13520 135479 13437 13396 13315 13275 13275	13600 13558 13516 13475 13433 13392 13352 13311 13271 13231	13596 13554 13512 13470 13429 13388 13348 13307 13267	13592 13549 13508 13466 13425 13384 13303 13263 13223	13587 13545 13545 13462 13421 13389 13299 13259	13583 13541 13499 13458 13417 13376 13375 13295 13255 13215	13579 13537 13495 13454 13413 13372 13331 13291 13251 13211	13575 13533 13491 13450 13450 13458 13327 13287 13287 13247	13579 13529 13446 13446 13364 13283 13283 13283 13283
161.00 162.00 163.00 163.00 163.00 165.00 167.00 168.00	13199 13160 13120 13081 13043 13004 12966 1298 12890 12852	13195 13156 13116 13077 13039 13000 12962 12924 12886 12848	13191 13152 13113 13074 13035 12996 12920 12882 12845	1318-7 1314-8 1310-9 1307-0 1303-1 1299-2 1291-6 1291-6 1287-8 1284-1	13183 13144 13105 13066 13027 12989 12950 12912 12875 12837	13179 13140 13161 13062 13023 12985 12987 12909 12871 12833	131.75 131.36 130.58 130.19 129.81 129.43 129.05 128.67 128.30	13171 13132 13093 13054 13016 12977 12939 12901 12863 12826	13167 13128 13089 13050 13012 12935 12935 12897 12860 12822	131 64 131 24 130 85 130 46 130 08 129 69 129 31 128 93 128 56 126 18
170.0 171.0 172.0 173.0 174.0 175.0 175.0 175.0 176.0 176.0	1 2615 12777 127740 12704 12667 12631 12595 12559 12559 1258	2811 12774 12777 12700 12664 12627 12555 12519 12484	12807 12770 12770 12733 12696 12660 12624 12558 12552 12516 12480	1 280 3 1 276 6 1 272 9 1 265 6 1 262 0 1 258 4 1 251 2 1 257 7	12800 12763 12726 12689 12653 12616 12584 12509 12473	1 2796 1 2759 1 2752 1 2685 1 2649 1 2613 1 2577 1 2541 1 2505 1 2470	12792 12755 12756 12682 12685 12609 12573 12537 12502 12466	12789 12752 12753 12678 12642 12606 12570 12534 12498 12463	12785 12748 12711 12674 12635 12605 12530 12495 12459	12781 12744 12747 12671 12634 12598 12562 12527 12491 12456
180.0 181.0 182.0 183.0 184.0 185.0 186.0 188.0 189.0	12452 12417 12387 12317 12278 12278 12244 12210 12176 12143	12449 12319 12379 12369 12275 12241 12207 12173 12139	12445 12410 12375 12340 12306 12272 12237 12203 12170 12136	1244-2 1240-7 1237-7 1233-7 1230-2 1226-8 1226-8 1220-0 1216-6 1213-3	12438 12403 12368 12334 12299 12265 12251 12197 12163 12129	12435 12400 12365 12330 12296 12261 12227 12193 12160 12126	12431 12396 12361 12327 12292 12258 12258 12290 12156 12123	12428 12393 12358 12323 12289 12254 12267 12163 12119	12424 12389 12354 12350 12285 12251 12217 12183 12149 12116	12421 12386 12351 12316 12282 12248 12214 12180 12146 12113
190.0 191.0 192.0 193.0 194.0 195.0 196.0 196.0 198.0	12109 12076 12043 12010 11977 11972 11912 11848 11848	12106 12073 12047 12007 11974 11941 11909 11845 11813	12103 12069 12036 12003 11971 11938 11906 11841 11809	12099 12066 12030 12000 11957 11935 11902 11870 11838 11806	12096 12063 12030 11997 11964 11932 11899 11867 11835 11803	12093 12059 12056 11926 11994 11961 11928 11896 11864 11832 11800	12089 12056 12023 11998 11998 11993 11861 11862 118797	12086 12053 12020 11987 11954 11922 11897 11857 11825	12083 12050 12057 11984 11981 11919 11886 11884 11822 11790	12079 12046 12013 11980 11948 11915 11883 11851 11819 11787
001+00 001+00 00123+00 0000000000000000000000000000000000	11784 11752 11752 11690 11658 11658 11597 11596 11535 11505	11781 11749 11718 11686 11655 11624 11594 11532 11532	11778 11746 11715 11683 11652 11621 11590 11590 11529 11499	11775 11743 11712 11649 11618 11587 11557 11526 11496	11771 11740 11708 11677 11646 11615 11584 11523 11493	11768 11737 11705 11643 11612 11551 11551 11520 11490	11765 11734 11732 11671 11640 11609 11548 11548 11548	11762 11730 11699 11698 11637 11606 11575 11544 11514	11759 11727 11696 11665 11634 11603 11572 11541 11511	11756 11724 11693 11662 11631 11669 11538 11538 11578
213-0 213-0 213-0 213-0 213-0 213-0 213-0 213-0 213-0	11475 11445 11415 11385 11385 11385 11385 11296 11238 11209	11472 11442 11412 11382 11382 11382 11293 11264 11235 11206	11469 11438 11409 11379 11349 11320 11291 11232	11456 11435 11406 11346 1177 111258 11229 11200	11463 11403 11403 11373 11343 11314 11384 11286 11286 1127	11460. 11429 11400 11370 11340 1131 11281 11282 11283 11194	11457 11426 11397 11367 11337 11308 11278 11249 11220 11191	11454 11423 11394 11364 11334 11275 11246 11217	11451 11421 11391 11361 11331 11302 11273 1:1243 11214	11448 11388 11358 11358 11329 11299 11240 11211

TABLÉ VII - Continued

GEOPOTENTIAL	ALTITUDE IN	METERS	as	a	function	őf	PRESSURE	IN.	MILLIBARS
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P, mb	0.0	0.1	0.2	0.3	0.4	0.5	0.6	Ő.7	0.8	0.9
00000000000000000000000000000000000000	11180 11151 11122 11094 11065 11037 11009 10981 10953	11177 11148 11119 11063 11034 11006 10978 10950 10922	11174 111.45 11117 11088 11060 11031 11003 1.0975 10948 10920	11171 11142 111714 11085 11057 11029 11001 10973 10945	111 68 11139 11111 11082 11054 11026 10998 109970 10942	11165 11137 11108 11080 11051 11023 10995 10967 10939	11162 11134 11105 11077 11048 11020 10992 10964 10936	11159 11431 11102 11074 11046 11017 10989 10961 10934	11157 11128 11099 11071 11043 11015 10987 10959 10931	11154 11125 11097 11068 11040 11012 10984 10926 10926
230.0 231.0 233.0 233.0 235.0 235.0 235.0 237.0 238.0 239.0	10898 10870 10842 10815 10788 10760 10733 10706 10679 10653	10895 10867 10840 10812 10785 10758 10731 10704 10677	1 0892 1 0864 1 0837 1 0810 1 0782 1 0755 1 0728 1 0701 1 0674 1 0647	1.0889 1.0862 1.0834 1.0807 1.0780 1.0752 1.0752 1.0698 1.0671 1.0644	10887 10859 10859 10831 10804 10750 10750 10723 10696 10669	10884 10856 10829 10801 10774 10747 10720 10693 10666 10639	10881 10853 10826 10799 10771 10744 10717 10690 10663 10636	10878 10851 10823 10726 10769 10741 10714 10687 10661 10634	10875 10848 10821 10793 10766 10739 10712 10685 10658	10873 10845 10818 10818 10719 10763 10736 10736 10682 10655
240.0 241.0 242.0 243.0 245.0 245.0 245.0 245.0 245.0 247.0 248.0	10525 10572 10572 10546 10520 10493 10467 10441 10415	10623 10596 10570 10543 10517 10491 10468 10438 10412	1.0620 1.0594 1.0567 1.0541 1.0514 1.0488 1.0462 1.0436 1.0410 1.0384	1.0518 1.0591 1.0565 1.0538 1.0512 1.0485 1.0459 1.0433 1.0407	10615 10582 10582 10535 10509 10483 10457 10430 10404 10378	10612 10586 10559 10533 10506 10480 10458 10428 10402 10376	10610 10583 10553 10530 10504 10477 10451 10425 10399 10373	10507 10580 10527 10527 10501 10475 10449 10423 10397	10604 10578 10551 10555 10499 10472 10446 10420 10394 10368	10602 10575 10542 10582 10496 10470 10443 10417 10391
251.00 251.00 252.00 253.00 253.00 255.00 255.00 255.00 255.00 255.00 255.00 255.00 255.00	10363 10337 10331 10286 10260 10235 10209 10124 10159 10134	10360 10335 10309 10283 10258 10232 10207 10181 10156 10131	10358 10332 10306 10281 10255 10230 10279 10154 10129	10355 10329 10304 10278 10253 10227 10202 10176 10151 10126	10353 10327 10301 10276 10250 10225 10199 10174	10350 10324 10299 10273 10247 10242 10197 10171 10146 10121	10347 10322 10296 10270 10245 10219 10194 10169 10144 10119	10345 10319 10268 10242 10217 10192 10166 10141 1016	10342 10317 10291 10265 10240 10214 10189 710164 10139	10340 10314 10288 10263 10237 10212 10187 10161 10136
260.0 261.0 262.0 263.0 265.0 265.0 265.0 266.0 267.0 268.0	10109 10084 10059 10034 10009 9984 9960 9935 9911	10106 10081 10056 10031 10006 9982 9957 9933 9908 9884	10104 10079 10054 10029 10004 9979 9955 9930 9936 9881	10101 10076 10051 10052 10002 9977 9952 9928 9903 9879	10098 10074 10049 10024 9999 9974 9950 9925 9901 9876	10076 10071 10046 10021 9977 9972 9947 9923 9898 9874	10093 10069 10044 10019 9994 9969 9945 9920 9896 9872	10091 10066 10041 10016 9992 9967 9542 9918 9894 9869	10089 10064. 10039 10014 9989 9965 9940 9916 9891 9867	10086 10061 10036 10011 9987 9962 9938 9913 9889 9864
270.0 271.0 272.0 273.0 274.0 275.0 276.0 277.0 278.0 278.0	9862 9838 9813 9789 9765 9741 9717 9694 9670 9646	9859 9835 9811 9787 9763 9739 9715 9667 9667	9857 9833 9809 9785 9761 9737 9713 9689 9665 9641	9855. 9830 9806 9782 9758 9734 9710 9686 9663 9639	9852 9828 9804 9780 9756 9732 9708 9684 9660 9637	9850 9826 9801 9777 9753 9729 9706 9682 9658 9634	9847 9823 9799 9775 9751 9727 9703 9679 9656 9632	9845 9821 9797 9773 9749 9725 9701 9677 9653 9630	9842 9818 9774 9770 9746 9722 9698 9675 9651 9627	9840 9816 9792 9768 9720 9696 9572 9649 9649
280.0 281.0 281.0 282.0 283.0 285.0 285.0 285.0 285.0 287.0 288.0	9623 9599 9576 95529 95529 9589 9486 9413	9620 9597 9573 9526 9503 9487 9434 9411	9618 9594 9571 9547 9524 9501 - QA78 9454 9431 9408	9615 9592 9568 9545 9522 9499 9475 9429 9406	9613. 9590 9566 9543 9519 9476 9473 9450 9427 9404	961.9 9587 9564 9517 9517 9494 9471 9448 9425 9402	9508 9585 9561 9535 9498 9468 9442 9442 939	9606 9583 9559 9512 95489 9466 94420 9397	9604 9580 9557 9533 9510 9487 9464 9441 9418	9601 9578 9554 9531 9508 9485 9461 9415 9415
290.0 291.0 291.0 293.0 293.0 295.0 296.0 297.0 298.0 298.0	9390 9367 9344 9322 9299 9276 9254 9251 9209 9186	9388 9365 9342 9319 9297 9274 9251 9259 9206 9184	9385 9363 9340 9317 9272 9272 92427 9204 9182	9383 9360 9337 9315 9292 9269 9247 9247 9202 9180	9381 9358 9312 9312 9267 9267 9245 9222 9200	9379 9356 9333 9310 9288 9265 9242 9220 9197 9175	9376 9353 9331 9308 9285 9263 9240 9218 9195	9374 9351 9328 9306 9283 9260 9238 9215 9193 9171	9372 9349 9326 9303 9281 9258 9213 9191 9168	9369 9347 9324 9301 9278 9256 9233 9211 9189 9166
300.0 301.0 302.0 303.0 303.0 305.0 305.0 306.0 306.0 309.0	9164 9142 9119 9097 9075 9053 9031 9009 8987 8966	9162 9139 9117 9095 9073- 9051 9029 9007 8985 8963	9159 9137 9115 9093 9097 9049 9027 9005 8983 8961	9157 9135 9113 9091 9097 9047 9025 9003 8981 8959	9155 9133 9111 9088 9066 9044 9022 9001 8979	9153 9131 9108 9086 9064 9042 9020 8998 8977 8955	9151 9128 9106 9084 9040 9018 8996 8974	9148 9126 9104 9082 9060 9038 9016 8994 8972 8950	9146 9124 9102 9080 9036 9014 8992 8970 8948	9144 9122 9100 9077 9033 9011 8990 8968 8946
310.0 312.0 312.0 313.0 314.0 315.0 316.0 316.0 318.0	8944 8922 8901 8879 8836 8815 8773 8773	89420 8998 86998 86755 86334 8812 87770 8749	8940 8916 8896 8875 8853 8832 8810 8789 8768 8746	8937 8916 8894 8873 8851 8830 8608 8787 4766 8744	8935 8914 8892 8870 8849 8827 8806 8783 8763 8763	8933 8911 8890 8868 8847 8825 8804 8763 8761	8931 8909 8888 8866 8845 8823 8802 8789 8738	8929 8907 8885 8864 8821 8800 8778 8757 8757	8927 8905 8863 8862 8819 8797 8776 8755 8734	8924 8903 5881 8860 8838 8817 8795 8774 8753 8753

P, mb	0.0	0.1	0.2:	0.3	0.4	0.5	0.6	0.7	0.8	0.9
320.00 321.00 322.00 323.00 324.00 325.00 325.00 327.00 328.00 329.00	8729 8708 8667 8666 8645 8624 8603 8583 8583 8562 8541	8727 8706 8685 8664 86643 8622 8601 8581 8560 8539	8725 8704 8683 8662 8641 8620 8599 8578 8558	8723 8702 8681 8660 8639 8618 8597 8576 8556 8535	8721 8700 8679 8658 8637 8616 8595 8574 8554 8533	8719 8698 8677 8656 8635 8614 8593 8572 8551 8531	8717 8696 8675 8653 8612 8512 8591 8549 8549	8715 8694 8673 8652 8631 8610 8589 8568 8547	8713 8691 8670 8649 8628 8608 8587 8566 8545	8710 8689 8668 8647 8625 8585 85643 8522
330.0 331.0 332.0 333.0 334.0 335.0 336.0 337.0 338.0 339.0	8520 8500 8479 8459 8438 8418 8397 8357 8357	8518 8498 8477 6457 8436 8416 8395 8355 8355	8516 8496 8475 8455 8434 8414 8393 8373 8353	8514 8494 8473 8453 8432 8412 8391 8391 8351 8331	8512 8492 8471 8451 8430 8410 8389 8369 8349 8329	8510 8490 8448 8448 8428 8408 8367 8367 8347	8508 84877 84466 84426 84405 83655 83455 83455	8506 8485 8444 8444 8408 8363 8363 8363 8363 8363	8504 8483 8442 8442 8422 8408 8361 8361 8320	8502 8481 84461 84420 83379 83353 8331 8331
340.0 341.0 342.0 343.0 344.0 345.0 345.0 347.0 348.0 349.0	8316 8296 8276 8256 8236 8216 8197 8157 8157	8394 8294 8254 8254 8214 8114 8175 8135	8312 8292 8252 8252 8232 8212 8173 8153 8153	8310 8290 8250 8250 8230 8210 8190 8171 8151 8131	8308 8288 8248 8248 9228 9188 8189 8149	8306 8286 8266 8246 8226 8206 8186 8167 8147 8127	8304 8284 8264 8224 8228 81165 8145 8125	8302 8282 8282 8242 8242 8262 8183 8163 8143 8123	8300 8280 8260 8240 8220 8200 8180 8161 6:41	8298 8278 8238 8218 81198 81179 81139 8119
350 • 0 351 • 0 352 • 0 353 • 0 353 • 0 355 • 0 356 • 0 357 • 0 358 • 0	8117 8098 8078 8058 8039 8019 8000 7981 7961 7942	8115 8096 8076 8057 8037 8037 7998 7979 7979	8113 8094 8074 8054 8035 8016 7996 7977 7957	8111 8092 8072 8053 8014 7994 7995 7955 7936	8109 8090 8051 8051 8012 7992 7973 7953 7934	8107 8088 8068 8049 8010 7990 7971 7952 7932	8105 8086 80667 8047 8008 7989 7950 7930	8103 8084 8064 8045 8025 8006 7986 7967 7948 7928	8102 8082 8062 8043 8023 8004 7984 7965 7946	8100 8080 8061 8041 8021 7982 7963 7944 7925
360.0 361.0 362.0 363.0 364.0 365.0 366.0 367.0 368.0 369.0	7923 7903 7884 7865 7846 7827 7808 7789 7770 7751	7921 7901 7882 7863 7844 7825 7806 7787 7768 7749	7919 7900 7880 7861 7842 7823 7804 7785 7766 7747	7917 7898 7878 7859 7840 7821 7802 7783 7764 7746	7915 7896 7877 7857 7838 7819 7800 7781 7763 7744	7913 7894 7875 7856 7836 7817 7798 7780 7761 7742	7911 7892 7873 7854 7835 7816 7797 7778 7759 7740	7909 7890 7871 7852 7833 7814 7795 7776 7757 7738	7907 7888 7869 7850 7831 7812 7793 7774 7755 7736	7905 7886 7867 7848 7829 7810 7791 7772 7753 7734
370.0 371.0 372.0 373.0 374.0 375.0 376.0 376.0 378.0 379.0	7732 7714 7695 7676 7657 7639 7620 7602 7583 7565	7730 7712 7693 7674 7656 7637 7618 7600 7581 7563	7729 7710 7691 7672 7654 7635 7616 7598 7579 7561	7727 7708 7689 7670 7652 7633 7615 7596 7578 7559	7.725 7706 7687 7669 7650 7631 7613 7594 7576	7723 7704 7685 7667 7648 7629 7611 7592 7574 7555	7721 7702 7684 7665 7646 7628 7609 7590 7572 7554	7719 7700 7682 7663 7644 7626 7607 7589 7570 7552	7717 7699 7680 7661 7642 7624 7605 7587 7568 7550	7715 7697 7678 7659 7641 7622 7603 7585 7566 7548
380.0 381.0 382.0 383.0 384.0 385.0 385.0 387.0 389.0	7546 7528 7509 7491 7473 7455 7436 7418 7400 7382	7544. 7526 7508 7489 7471 7453 7435 7435 7398. 7380	7542 7524 7506 7487 7469 7451 7433 7415 7396 7378	7541 7522 7504 7486 7467 7449 7431 7431 7435 7397	7539 7520 7502 7484 7466 7447 7429 7411 7393 7375	7537 7519 7519 7482 7464 7445 7427 7409 7391 7373	7535 7517 7498 7480 7462 7444 7425 7407 7389 7371	7533 7515 7497 7478 7460 7442 7424 7406 7387 7369	7531 7513 7495 7476 7458 7440 7422 7404 7386 7368	7530 7511 7493 7475 7456 7438 7420 7402 7384 7366
390.0 391.0 392.0 393.0 393.0 395.0 395.0 397.0 398.0 399.0	7364 7346 7328 7310 7292 7274 7256 7239 7221 7203	7362 7344 7326 7308 7290 7272 7255 7237 7219 7201	7360 7342 7324 7306 7289 7271 7253 7253 7217 7200	7359 7341 7323 7305 7267 7269 7251 7233 7216 7198	7357 7339 7321 7303 7267 7267 7249 7231 7214 7196	7355 7337 7319 7301 7265 7265 7247 7230 7212 7194	7353 7335 7317 7299 7281 7264 7264 7228 7210 7192	7351 7333 7315 7297 7280 7262 7244 7226 7208 7191	7350 7332 7314 7296 7278 7260 7242 7224 7207 7189	7348 73312 7312 7294 7276 7258 7240 7240 7205 7187
400.0 401.0 402.0 403.0 405.0 405.0 406.0 407.0 409.0	7185 7168 7150 7133 7115 7098 7080 7063 7045 7028	7184 7166 7148 7131 7113 7096 7078 7061 7061 7063	7182 7164 7147 7129 7112 7094 7077 7059 7042 7024	7190 7162 7145 7127 7110 7092 7075 7057 7040 7023	71 78 71 61 71 43 71 26 71 08 70 91 70 73 70 56 70 38 70 21	71 77 71 59 71 41 71 24 71 06 70 89 70 71 70 54 70 37 70 19	7175 7157 71540 7122 7105 7087 7087 7052 7052 7017	7173 7155 7138 7120 7103 7085 7068 7050 7033 7016	7171 7154 7156 7119 7101 7084 7066 7049 7031 7014	7170 7152 7134 7117 7099 7082 7064 7047 7030 7012
410.0 411.0 412.0 413.0 414.0 415.0 416.0 417.0 418.0	7011 6993 6976 6959 6942 6924 6907 6873 6856	7009 6991 6977 6950 6950 6905 6888 6851	7007 6990 6972 6935 6938 6921 6904 6887 6870 6853	7005 6988 6971 6936 6936 6919 6902 6885 6868 6851	7004 6986 6989 6952 6935 6917 6900 6886 6866 5849	7002 6985 6967 6953 6916 6892 6865 6847	7000 6983 6966 6948 6931 6914 6897 6883 6846	5998 6981 6964 6947 6929 6912 6878 6861 6844	6997 6979 6978 6945 6928 6911 6876 6876	6995 6978 6943 6943 6926 69092 6875 6841

GEOPOTENTIAL ALTITUDE IN METERS as a function of PRESSURE IN MILLIBARS

								•		
P, mb	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
421.0 421.0 423.0 423.0 423.0 425.0 425.0 425.0 427.0 428.0 429.0	6839 6822 6805 6788 6771 6754 6738 6721 6704 6687	6837 6820 6803 6787 6770 6753 6736 6719 6702 6686	6836 6819 6802 6785 6768 6751 6734 6718 6701 6684	6834 6817 6800 6783 6766 6749 6733 6716 6699 6682	6832 6815 6798 6781 6765 6748 6731 6714 6697 6681	6831 6814 6797 6780 6763 6746 6749 6713 6696 6679	6829 6812 6795 6778 6761 6744 6728 6711 6694 6677	6827 6810 6793 6776 6760 6743 6726 6709 6692 6676	6825 6808 6792 6775 6758 6741 6724 6708 6691 6674	6824 6807 6790 6773 6756 6739 6723 6706 5689
430.0 431.0 432.0 433.0 435.0 435.0 435.0 437.0 438.0 439.0	6671 6654 6638 6621 6604 6588 6571 6538 6538	6569 6552 6636 6619 6603 6586 6570 6553 6537 6520	6667 6651 6634 6618 6601 6585 6585 6552 65535 6519	6666 6649 6633 6616 6599 6583 6550 6550 6534 6517	6664 6647 6631 6598 6581 6565 6548 6532 6516	6662 6646 6629 6613 6596 6580 6563 6547 6530 6514	6661 6644 6628 6611 5594 6576 65761 6529 6512	6659 6642 6609 6593 6576 6560 6543 6527 6511	6657 6644 6628 6591 6575 6558 6542 6509	6656 6639 6623 6606 6589 6557 6557 6540 6524
440.00 441.00 442.00 443.00 .445.00 .445.00 446.00 447.00 448.00 449.00	6506 6489 6473 6457 6441 6424 6408 6376 6360	6504 6488 6475 6455 6439 6423 6426 6374 6358	6502 6486 6476 6454 6437 6421 6405 6373 6356	6501 6484 6452 6436 6419 6403 6387 6371 6355	6499 6483 6450 6434 6418 6402 6369 6353	6498 6445 6449 6449 6416 6400 6384 6368 6352	5485 6463 6447 6431 6415 6398 6382 6366 6350	6494 6478 6462 6429 6419 6419 6397 6381 6365 6348	6493 6460 6464 6428 6411 6395 6379 6353 6347	6491 6458 6442 6426 6410 6394 6377 6361 6345
451.0 452.0 452.0 455.0 455.0 456.0 456.0 459.0	6344 6328 6312 6296 6290 6264 6248 6232 6216 6200	6342 6326 6310 6294 6278 6262 6246 6230 6214 6199	6340 6324 6308 6296 6276 6260 6245 6229 6197	6339 6323 6307 6291 6275 6259 6243 6227 6211 6195	6337 6321 6325 6289 6273 6257 6241 6226 6210 6194	6336 63204 6388 6276 6256 6240 6228 6192	6334 6318 6386 6286 6270 6254 6222 6222 6207	6332 6316 6316 6284 6268 6253 6221 6221 6205 6189	6331 6315 6283 6283 6267 6251 6235 6219 6203 6188	6329 6313 6291 6265 6265 6243 6238 6202 6186
460.0 461.0 462.0 463.0 464.0 465.0 466.0 467.0 468.0 469.0	6184 6169 6153 6137 6132 6106 6090 6075 6059	6183 6167 6151 6136 6120 6104 6089 6073 6058 6042	6181 6156 6150 6134 6118 6103 6087 6072 6056	6148 6148 6117 6117 6101 6086 6070 6054 6039	6162 6162 6131 6131 6115 6100 6084 6063 6053	6161 6161 6129 6114 6098 6082 6082 6051 6036	6159 6143 6142 6142 6097 6085 6050 6034	6173 6158 6126 6126 6111 6095 6074 6048 6033	6172 6156 6140 6125 6109 6093 6078 6062 6047 6031	6170 6154 6123 6123 6107 6092 6076 6061 6045 6030
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TABLE VII - Continued

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641-0 641-0 642-0 643-0 6445-0 645-0 645-0 645-0 645-0	3711 3699 3687 3675 3653 3650 3639 3627 3615 3603	3709 3697 3685 3673 3661 3649 3637 3625 3613 3601	3708 3696 3684 3672 3660 3648 3636 3624 3612 3600	3707 3695 3683 3671 2659 3647 3635 3623 3611 3599	3706 3694 3682 3670 3658 3646 3634 3622 3610 3598	3705 3693 3681 3669 3656 3644 3633 3621 3609 3597	3703 3691 3679 3657 3655 3643 3631 3619 3607	3702 3690 3678 3666 3652 3642 3630 3618 3606	3701 3689 3677 3665 3653 3641 3629 3617 3605 3893	3700 2588 3676 3664 3652 3640 3628 3616 3592
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760-0 761-0 762-0 762-0 764-0 765-0 766-0 767-0 768-0 769-0	2361 2350 2350 2329 2319 2318 2298 2298 2287 2277 2266	2360 2349 2339 2328 2318 2307 2297 2296 2276 2265	2358 2348 2337 2337 2316 2296 2285 2275 2264	2357 2347 2336 2326 2316 2305 2295 22984 2274 2263	2356 2346 2335 2325 2314 2304 2283 2273 2262	2355 2345 2334 2324 2313 2303 2292 2282 2272 2261	2354 2344 2333 2323 2312 23902 2291 2291 2271 2260	2353 2343 2332 2322 2311 2301 2290 2280 2270 2259	2352 2342 2331 2321 2310 2300 2289 2279 2269 2258	2351 2341 2330 2320 2309 2288 2278 2268 2257
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780 ±0 781 •0 782 •0 783 •0 783 •0 785 •0 786 •0 787 •0 789 •0	2153 2132 2132 2112 21101 2091 2081 2060	2152 2141 2131 2121 2111 2100 2090 2080 2070 2059	2151 2140 2130 2120 2099 2089 2069 2068	2150 2139 2129 2119 2109 2098 2088 2078 2068 2057	2149 2138 2128 21107 2097 2087 2067 2067 2056	2148 2137 21127 21117 2106 2096 2086 2066 2066 2055	2146 2136 2136 2115 2095 2085 2065 2065	2145 2135 2135 2115 2114 2094 2084 2064 2064 2053	2144 2134 2124 21103 2093 2083 2063 2063 2052	2143 21133 21133 21132 2092 2082 2072 2051
790.0 791.0 792.0 793.0 793.0 795.0 796.0 796.0 798.0 799.0	2050 2040 2030 2020 2010 2000 1989 1969 1969	2049 2039 2029 2019 2009 1998 1988 1978 1968	2048 2038 2018 2008 2997 1987 1977 1977	2047 2037 2027 2017 2017 1996 1986 1966 1956	2046 2036 2026 2006 1995 1985 1985 1965	2045 2035 20015 20015 1984 1984 1964	2044 2034 2024 2014 2004 1993 1983 1963 1963	2043 2033 2023 2003 2003 1992 1982 1982 1962 1952	2042 2032 2022 2022 2002 1991 1981 1961 1961	2041 2031 2021 2011 2001 1990 1980 1970 1960 1950
800.0 802.0 802.0 803.0 805.0 805.0 806.0 806.0	1949 1939 1929 1929 1909 1899 1889 1869 1869	1948 1938 1928 1918 1908 1898 1868 1878 1868	1947 1937 1927 1917 1907 1897 1887 1867	1946 1936 1926 1916 1906 1896 1886 1876 1866	1935 1935 1925 1915 1895 1887 1885 1865	1944 1934 1924 1914 1894 1884 1864	1943 1933 1923 1913 1903 1893 18873 1863 1863	1942 1932 1922 1912 1902 1892 18872 1862 1852	1941 1931 1921 1911 1901 1891 1881 1861 1861	1940 1930 1920 1910 1900 1890 1880 1870 1860
810.0 811.0 812.0 813.0 815.0 815.0 816.0 816.0 816.0	1849 1839 1819 1819 1709 1789 1769 1759	1848 1838 1828 1818 1808 1798 1788 1778 1768	1847 1837 1827 1817 1807 1797 1787 1777 1767	1.846 1.836 1.816 1.816 1.806 1.796 1.786 1.776 1.7766 1.756	1845 1835 1825 1815 1805 1795 1785 1775 1775	1844 1834 1824 1814 1804 1794 1784 1774 1764	1843 1823 1823 1813 1803 1793 1793 1773 1763	1842 1832 1822 1812 1802 1792 1772 1772 1762 1752	1841 1831 1821 1801 1791 1781 1771 1751	1840 1830 1820 1810 1800 1790 1770 1750

TABLE VII - Continued

	-	7.7	ت							
P, mb	0.0	0.1	0.2	0.3	0,4	0.5	0.6	0.7	0.8	0.9
820.0 821.0 822.0 824.0 825.0 825.0 826.0 828.0 828.0	1749 1740 1730 1720 1710 1700 1680 1671 1661	1748 1739 1729 1719 1709 1699 1679 1670 1660	1747 1738 1728 1718 1708 1698 1698 1679 1669 1659	1746 1737 1727 1717 1707 1697 1687 1678 1668 1658	1745 1736 1726 1716 1706 1696 1685 1677 1667	1744 1735 1725 1715 1705 1695 1695 1676 1666	1743 1734 1724 1714 1704 1694 1695 1665	1742 1733 1723 1713 1703 1693 1683 1664 1664	1742 1732 1722 1712 1702 1692 1693 1663 1653	1741 1731 1721 1711 1701 1691 1681 1672 1662 1652
838.0 839.0	1651 1642 1632 1622 1612 1602 1593 1583 1573 1563	1650 1631 1631 1611 1611 1692 1582 1572	1649 1639 1630 1620 1610 1600 1591 1581 1571	1648 1638 1639 1619 1609 1599 1590 1580 1570 1561	1647 1637 1628 1618 1608 1598 1589 1579 1569 1569	1646 1636 1627 1617 1607 1599 1588 1578 1568 1559	1645 1635 1626 1616 1606 15987 1577 1567	1644 1634 1625 1625 1625 1505 1596 1576 1566	1643 1633 1624 1614 1604 1595 1585 1575 1565 1556	1642 1633 1613 1613 1603 1594 1574 1564
840.0 841.00 843.0 843.0 844.0 846.0 846.0 847.0 848.0	1554 1544 1534 1525 2515 1505 1486 1477 1467	1553 15533 15324 1524 15104 1595 1485 1476	1552 1542 1542 1532 1523 1513 1503 1494 1484 1475 1465	1551 1541 1531 - 1522 1512 1503 1493 1493 1464	1550 (1540) 1540 1521 1511 1502 1492 1482 1473 1463	1549 1539 1530 1520 1510 1501 1491 1481 1472 1462	1548 1538 1539 1519 1509 1500 1490 1480 1471 1461	1547 1538 1518 1518 1508 1499 1479 1470	1546 1536 1537 1517 1517 1498 1498 1478 1469	1545 1535 1536 1516 1506 1497 1477 1468 1458
850.0 851.0 852.0 853.0 8554.0 856.0 857.0 859.0	1457 1448 1438 1429 1419 1409 1400 1390 1381	1456 1447 1447 1428 1418 1408 1399 1389 1380 1370	1455 1446 1436 1427 1417 1408 1398 1388 1379	1454 1445 1426 1416 1407 1397 1387 1368	1453 1444 1435 1415 1416 1396 1387 1377 1367	1452 1443 1424 1414 1405 1386 1376 1367	1452 1442 1433 1413 1404 1394 1385 1375 1366	1.451 1.4431 1.422 1.412 1.412 1.403 1.393 1.384 1.374 1.365	1450 1440 1430 1421 1411 1402 1392 1383 1373 1364	1449 1439 1430 1420 1410 1401 1391 1382 1372 1363
860.0 861.0 863.0 864.0 864.0 866.0 866.0 867.0 869.0	1362 1352 1353 1333 1324 1314 1305 1295 1286 1277	1361 1351 13542 1332 1323 1313 1304 1295 1285 1276	1360 1350 1341 1331 1322 1312 1303 1294 1284 1275	1359 1349 1340 1330 1321 1312 1302 1293 1283 1274	1358 1349 1339 1330 1320 431 1301 1292 1282 1273	1357 1348 1338 1329 1319 1310 1300 1291 1281 1272	1356 1347 1328 1318 1309 1209 1290 1280 1271	1355 1346 1336 1327 1317 1308 1298 1289 1279	1354 1345 1326 1326 1316 1307 1297 1288 1278	1353 1344 1334 1325 1315 1306 1296 1287 1278 1268
870.0 871.0 872.0 872.0 873.0 874.0 875.0 876.0 877.0 878.0 879.0	1267 1258 1248 1239 1230 1220 1211 1201 1192 1183	1266 1257 1247 1236 1229 1219 1210 1201 1191 1182	1265 1256 1246 1237 1228 1219 1209 1200 1190	1264 1255 1246 1237 1217 1218 1199 1189	1263 1254 1255 1235 1226 1216 1217 1198 1188 1179	1 262 1 253 1 244 1 234 1 225 1 215 1 206 1 197 1 187 1 178	1262 1252 1243 1224 1215 1205 1196 1186 1177	1261 1251 1242 1232 1214 1214 1195 1186	1260 1250 1241 1231 1222 1213 1203 1194 1185 1175	1259 1249 1240 1231 1221 1212 1202 1193 1184 1174
880.0 881.0 883.0 883.0 885.0 885.0 885.0 885.0	1173 1164 1155 1145 1136 1127 1118 1108 1099	1172 1163 1154 1145 1135 1126 1117 1107 1098	1172 1162 1153 1144 1134 1125 1116 1106 1097 1088	1171 1161 1152 1143 1133 1124 1115 1106 1096 1087	1170 1160 1151 1142 1132 1123 1114 1105 1095	1169 1159 1150 1141 1132 1122 1113 1104 1094	1168 1159 1149 1140 1131 1121 1103 1093 1084	1167 F158 1148 1139 1130 1120 1111 1102 1093	1166 1157 1147 1138 1129 1119 1110 1101 1092 1082	11'65 1156 1146 1147 1128 1119 1109 1100 1091
890 0 0 891 0 892 0 893 0 893 0 895 0 895 0 896 0 898 0	1081 1071 1052 1053 1044 1034 1025 1016	1.080 1.070 1.051 1.052 1.043 1.033 1.024 1.015 1.006	1079 1069 1060 1051 1042 1033 1023 1014 1005	1078 1069 1059 1050 1041 1032 1022 1013 1004	1077 1068 1058 1049 1040 1031 1022 1012 1003	1076 1067 1057 1058 1039 1030 1030 10021 1011 1002	1075 1066 1057 1047 1038 1029 1020 1011 1001	1074 1065 1056 1046 1037 1028 1019 1010 1000	1073 1064 1055 1045 1036 1027 1018 1009 999	1072 1063 1054 1055 1035 1026 1017 1008 999 989
900.0 901.0 902.0 903.0 904.0 905.0 906.0 907.0 908.0	988 979 970 951 952 943 934 925 915	988 978 960 951 942 933 924 915	987 978 969 959 950 941 933 914 905	986 977 968 949 949 941 932 913 904	985 976 967 957 948 939 931 912 903	984 975 966 956 947 938 929 920 911	983 974 965 956 946 937 929 910 901	982 973 964 955 946 935 927 918 909 900	981 972 963 954 945 935 926 917 908 899	980 971 963 953 944 935 926 907 898
910.0 911.0 911.0 913.0 914.0 914.0 916.0 916.0 918.0	897 888 879 870 852 843 835 816	896 887 878 869 860 851 842 833 824 815	895 886 877 868 859 850 841 832 814	895 885 8767 858 849 849 841 822 813	894 885 876 857 848 839 839 821 812	893 884 875 856 856 847 838 829 820 811	892 883 8745 856 847 838 819 810	891 882 873 855 855 846 837 828 819 810	890 881 872 863 854 845 837 818 809	889 880 871 862 853 844 835 826 817 808

TABLE VII - Continued

1010.0 1011.0 1012.0 1013.0 1015.0 1016.0 1016.0 1018.0	1000.0 1001.0 1002.0 1003.0 1003.0 1005.0 1006.0 1007.0 1008.0 1009.0	990.0 991.0 992.0 993.0 994.0 995.0 996.0 997.0 998.0	980.0 981.0 982.0 983.0 984.0 985.0 986.0 987.0 987.0	970.0 971.0 972.0 973.0 974.0 976.0 976.0 978.0 978.0	960.0 961.0 962.0 963.0 964.0 965.0 966.0 967.0 968.0 969.0	951-0 951-0 952-0 953-0 954-0 956-0 956-0 957-0 958-0	940.0 941.0 942.0 943.0 943.0 945.0 945.0 945.0 945.0 947.0 949.0	930.0 931.0 932.0 933.0 934.0 935.0 936.0 937.0 938.0 939.0	920.0 921.0 922.0 923.0 924.0 925.0 927.0 927.0 928.0 929.0	P, mb
27 19 10 -6 -123 -31 -39 -48	1.1 1 1.02 1.94 86 77 69 61 52 44	195 187 178 170 161 153 145 136 128	281 272 263 255 238 229 221 212 204	366 358 349 341 332 315 306 298 289	453 444 436 427 418 410 401 392 384 375	540 532 523 514 505 488 479 462	628 611 6023 5984 5757 568 549	717 708 699 691 682 673 664 655 646 637	807 798 789 780 771 762 753 744 735 726	0.0
268 1017 -15 -242 -49	110 102 93 85 76 68 60 81 43	195 186 178 169 161 152 144 135 127	280 271 263 254 246 237 228 220 211 203	366 357 348 340 331 323 314 305 297 288	452 443 435 426 417 409 400 391 383 374	539 531 522 513 504 496 487 478 470 461	628 619 610 601 593 575 566 557	716 707 699 690 681 663 654 654 636	806 797 788 779 770 761 752 743 734	0.1
25 17 9 -8 -16 -25 -33 -49	109 101 92 84 76 67 59 50 42	194 185 177 168 160 151 134 134	279 270 262 253 245 236 228 219 211 202	365 356 347 339 330 322 313 305 296 287	451 443 434 425 417 408 399 391 382 373	539 530 521 512 504 495 486 477 469 460	627 618 609 600 591 583 574 565 547	715 707 698 689 671 6653 644 635	805 787 787 778 769 751 742 742 724	0.2
25 18 19 177 -25 -342 -50	108 100 92. 683 75 66 58 50 411 33	193 184 176 167 159 151 142 134 125	278 269 261 252 244 235 227 218 210 201	364 355 347 338 329 321 312 304 295 287	450 442 433 424 416 407 398 390 381 372	538 529 520 513 494 485 468 459	626 617 608 599 590 582 573 554	715 706 697 688 679 670 661 652 643 635	804 795 786 777 768 759 750 741 732 724	0.3
24 157 -1 -10 -18 -26 -34 -41	1 08 99 91 82 74 66 57 49 40	1 92 1 83 1 75 1 67 1 58 1 50 1 41 1 33 1 24 1 16	277 269 2651 2643 2246 227 200	363 354 354 337 329 320 311 303 294 286	450 441 432 415 406 397 380 372	528 519 5112 593 484 476 458	625 616 607 598 590 581 5763 554 546	714 705 696 687 678 669 660 651 643 634	803 794 785 776 757 758 749 740 732 723	0.4
2562097542 -127542 -5542	107 98 90 81 73 65 48 31	191 183 174 166 157 149 132 124	276 268 251 242 234 225 217 208 200	362 353 345 336 328 319 311 302 293 285	449 440 431 423 414 405 397 388 379 371	536 527 518 510 501 492 483 475 466 457	524 615 606 597 589 580 571 562 553 545	713 704 695 686 677 668 659 651 642 633	802 793 784 775 757 757 749 740 731 722	0.5
22 -3 -3 -11 -228 -364 -55	106 97 89 81 72 64 56 47 39	190 F82 173 165 156 140 131 123	275 267 258 250 241 233 224 216 207	361 353 344 335 327 318 310 301 293 284	448 439 432 413 404 396 378 378	535 536 5518 5090 491 4474 465	523 614 605 597 588 579 570 561 553	712 703 694 685 676 667 659 650 641	801 792 783 775 766 757 748 739 730 721	0.6
2135 -120 -120 -227 -345 -54	105 97 88 80 71 63 55 46 38	189 181 172 164 156 147 139 130 122	275 266 257 249 240 232 223 215 206	360 352 343 335 326 317 309 292 283	447 438 430 421 412 404 395 386 378 369	534 5257 5108 499 499 492 464 464	613 605 596 587 578 561 552 543	711 702 693 684 675 667 658 649 640 631	7 801 792 783 774 765 756 756 747 738 729 720	0.7
20 14 -5 -12 -23 -38 -44	104 96 87 79 74 62 54 45 329	189 180 172 163 155 146 138 129 121 113	274 2657 248 240 231 223 214 206 197	360 351 342 334 325 317 308 299 291 282	446 437 429 420 411 403 394 385 377 368	533 525 51.67 498 490 481 463 455	621 613 604 595 586 577 568 560 551 542	710 701 692 683 675 666 657 648 639	800 791 782 773 764 755 746 737 728 719	0.8
20 11 	103 957 878 701 633 455 28	188 179 171 162 154 147 129 120	273 264 254 2547 239 232 213 205 196	359 350 341 333 324 316 309 290 281	445 436 428 419 410 402 385 3767	5324 5325 5555 5497 489 4473 463	620 6012 5014 5015 5015 5015 5015 5015 5015 5015	709 700 691 683 674 665 656 647 638 629	799 790 761 772 763 754 745 736 727	0.9

1110.0 1111.0 1112.0 1113.0 1114.0 1115.0 1116.0 1117.0	1100.0 1101.0 1103.0 1103.0 1104.0 1105.0 1105.0 1107.0 1108.0	1090.0 1091.0 1093.0 1093.0 1094.0 1095.0 1097.0 1098.0	1080.0 1081.0 1082.0 1083.0 1085.0 1085.0 1085.0 1087.0 1088.0	1070.0 1071.0 1072.0 1073.0 1073.0 1074.0 1075.0 1077.0 1078.0	1060.0 1061.0 1062.0 1063.0 1063.0 1065.0 1066.0 1066.0 1069.0	1050.0 1051.0 1052.0 1053.0 1054.0 1055.0 1056.0 1057.0 1058.0 1059.0	1040 • 0 1042 • 0 1042 • 0 1043 • 0 1045 • 0 1046 • 0 1047 • 0 1048 • 0 1049 • 0	1030 • 0 1031 • 0 1032 • 0 1033 • 0 1035 • 0 1035 • 0 1037 • 0 1039 • 0	1020 • 0 1021 • 0 1023 • 0 1023 • 0 1025 • 0 1025 • 0 1027 • 0 1029 • 0	P, mb
776 784 791 799 807	-698 -706 -714 -722 -729 -737 -745 -753 -760 -768	-620 -628 -636 -644 -651 -651 -667 -667 -683 -691	-541 -549 -557 -565 -573 -581 -589 -597 -604 -612	-462 -478 -478 -486 -494 -510 -518 -526 -533	-382 -398 -398 -406 -414 -422 -430 -438 -446	-302 -310 -318 -326 -334 -342 -358 -358 -356	- 220 - 220 - 2257 - 245 - 253 - 269 - 277 - 285 - 293	-1.39 -147 -155 -163 -171 -180 -188 -196 -204	-56. -64. -7.3. -81. -89. -97. -106. -1122. -130	0.0
-777 -784 -792 -800 -808	-699 -707 -715 -722 -730 -738 -746 -753 -761 -769	-621 -629 -637 -644 -652 -668 -668 -676 -684 -691	-542 -550 -558 -566 -574 -582 -589 -597 -605 -613	-463 -471 -479 -487 -495 -503 -511 -518 -526 -534	-383 -391 -399 -407 -815 -423 -4439 -447 -455	-302 -310 -313 -327 -335 -343 -351 -359 -367 -375	-252 -2537 -2544 -252 -252 -278 -276 -294	-139 -148 -156 -164 -172 -180 -188 -197 -205 -213	-57 -65 -73 -82 -90 -106 -1123 -123	0.1
-777 -785 -793 -801 -808 -816	-700 -708 -715 -723 -731 -739 -746 -754 -762	-622 -630 -637 -645 -653 -661 -669 -676 -684 -692	-543 -551 -557 -567 -582 -598 -696 -614	-464 -472 -480 -487 -495 -503 -511 -519 -527	-384 -392 -408 -408 -416 -424 -432 -440 -448	-303 -311 -319 -327 -335 -343 -352 -360 -368 -376	- 2338 - 2338 - 2453 - 2533 - 2773 - 2855 - 2855	-1'40 -1'48' -1'57 -1'65 -1'73 -1'81 -189 -197 -206 -214	-58 -66 -74 -83 -91 -99 -107 -115 -124 -132	0.2
-778 -786 -794 -801 -809 -817	-701 -708 -716 -724 -732 -740 -747 -755 -763	-622 -638 -638 -646 -654 -669 -677 -685 -693	-544 -552 -560 -567 -575 -583 -599 -607 -615	-464 -472 -488 -486 -504 -5120 -528 -536	-384 -393 -401 -409 -417 -425 -431 -448 -456	-304 -312 -320 -320 -326 -336 -344 -352 -360 -368 -376	-231 -2339 -2455 -2455 -253 -2633 -2	-141 -149 -157 -157 -174 -182 -190 -198 -206 -215	-59 -67 -75 -83 -92 -100 -108 -116 -125 -133	0.3
-779 -787 -794 -802 -810 -816	-701 -709 -717 -725 -733 -740 -748 -756 -764 -771	-623 -631 -639 -647 -655 -662 -670 -678 -686 -694	-545 -552 -568 -576 -584 -592 -600 -608	-465 -473 -481 -489 -505 -513 -529 -537	-385 -393 -401: -409 -417 -425 -433 -449 -457	-305 -313 -329 -327 -345 -345 -361 -369 -377	-232 -2240 -2440 -2456 -2564 -26780 -22897	-142 -150 -158 -165 -175 -183 -199 -207 -215	-59 -68 -76 -84 -92 -109 -125 -134	0,4
-780 -788 -795 -803 -811 -818	-702 -710 -718 -726 -733 -741 -749 -757 -764 -772	-624 -632 -640 -648 -655 -663 -671 -679 -687 -694	-545 -553 -561 -569 -577 -585 -593 -608 -616	-466 -474 -482 -498 -506 -514 -530 -537	-386 -394 -402 -418 -425 -434 -434 -450 -458	-306 -314 -322 -338 -346 -354 -370 -378	-224 -233 -241 -2457 -265 -265 -273 -281 -289 -297	-143 -151 -159 -167 -175 -184 -192 -200 -208 -216	-60 -68 -77 -85 -93 -101 -110 -118 -126 -134	Ó, 5
-781 -788 -796 -804 -811 -819	-703 -711 -719 -726 -734 -742 -757 -757 -765	-625 -633 -641 -648 -656 -664 -672 -680 -687 -695	-546 -554 -562 -578 -578 -586 -593 -609 -617	-467 -475 -483 -499 -5122 -5122 -5338	-38.7 -39.5 -40.3 -41.1 -41.9 -42.7 -43.5 -45.1 -45.9	-306 -314 -333 -331 -339 -347 -355 -363 -371 -379	- 253 - 203 - 203	+143 -1152 -160 -168 -176 -184 -193 -209 -217	-61 -69 -78 -86 -94 -102 -111 -119 -127 -135	0.6
-781 -789 -797 -804 -812 -820	-704 -712 -719 -727 -735 -743 -750 -758 -766 -774	-626 -623 -641 -649 -655 -673 -688 -696	-547 -555 -563 -571 -578 -586 -594 -610 -618	-468 -476 -484 -491 -497 -507 -5123 -531 -539	-388 -396 -404 -412 -420 -428 -436 -452 -460	-307 -315 -323 -331 -339 -348 -356 -364 -372 -380	-2234 -2234 -2234 -2259 -2267 -22783 -2291 -2299	-144 -152 -161 -169 -177 -185 -193 -202 -210 -218	-62 -70 -78 -87 -95 -103 -111 -128 -136	0.7
782 790 798 805 813	-705 -712 -720 -728 -736 -743 -751 -759 -767	-626 -634 -642 -658 -658 -666 -673 -681 -689	-548 -556 -563 -571 -579 -587 -595 -603 -611 -619	-468 -476 -484 -492 -508 -5124 -532 -540	-389 -397 -405 -413 -421 -429 -437 -452 -460	-308 -316 -324 -332 -340 -348 -356 -364 -372 -380	-227 -235 -243 -251 -257 -267 -276 -284 -292	-145 -153 -161 -170 -178 -186 -194 -202 -211 -219	-63 -71 -79 -87 -96 -104 -112 -129 -137	0.8
-783 -791 -798 -806 -814	-705 -713 -721 -729 -736 -744 -752 -760 -767	-627 -635 -643 -651 -659 -674 -682 -690 -698	-548 -5564 -570 -588 -5964 -612 -619	-469 -477 -485 -493 -501 -509 -517 -533 -541	-389 -397 -405 -413 -421 -429 -437 -453 -461	-309 -317 -325 -333 -341 -349 -357 -365 -373 -381	-236 -236 -244 -250 -268 -276 -2853 -301	-146 -154 -162 -179 -187 -185 -203 -211 -220	-63 -80 -80 -87 -105 -113 -129 -138	0.9

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TABLE VII - Continued

		بغد								
P, nnb	0.0	0.1	0.2	.0.3	0.4	0.5	0.6	0.7	0.8	0.9
1 120 • 0 1 121 • 0 1 122 • 0 1 123 • 0 1 123 • 0 1 125 • 0 1 127 • 0 1 127 • 0 1 129 • 0	-853 -861 -868 -876 -884 -899 -907 -914	-854 -8619 -867 -884 -8920 -900 -9015 -923	-854 -862 -877 -877 -885 -893 -9908 -916 -923	-855 -863 -871 -878 -886 -894 -901 -909 -916 -924	-856 -864 -871 -877 -887 -894 +902 -917 -925	-857 -864 -878 -887 -887 -895 -9918 -918	-858 -8653 -873 -888 -896 -993 -911 -919	- 858 - 866 - 874 - 861 - 869 - 897 - 994 - 912 - 920 - 927	-859 -8674 -882 -8897 -9053 -928	-860 -868 -875 -883 -890 -896 -913 -921
1 130 · 7 1 131 · 0 1 132 · 0 1 133 · 0 1 135 · 0 1 135 · 0 1 137 · 0 1 137 · 0 1 139 · 0	-929 -937 -945 -952 -960 -967 -975 -983 -990 -998	-930 -938 -945 -9453 -961 -976 -983 -999	-931 -939 -944 -954 -961 -969 -9784 -992 -999	-932 -939 -947 -955 -962 -970 -977 -935 -992	-932 -940 -940 -955 -953 -971 -978 -986 -993	-933 -941 -948 -956 -964 -971 -986 -994 -1002	-934 -942 -947 -957 -964 -972 -987 -995 -1002	-935 -942 -950 -958 -965 -973 -980 -988 -996	-936 -943 -951 -958 -966 -974 -981 -989 -996 -1004	-936 -944 -952 -959 -967 -974 -989 -997
1 140.0 1 141.0 1 142.0 1 143.0 1 145.0 1 145.0 1 145.0 1 147.0 1 148.0	-1005 -1013 -1028 -1028 -1036 -1043 -1051 -1058 -1066 -1073	-1006 -1014 -1029 -1036 -1044 -1057 -1059 -1074	-1007 -1014 -1022 -1030 -1037 -1045 -1052 -1067 -1067	-1008 -1015 -1023 -1038 -1038 -1045 -1053 -1068 -1076	-1008 -1016 -1024 -1031 -1039 -1046 -1054 -1069 -1076	-1009 -1017 -1024 -1032 -1039 -1047 -1054 -1062 -1069 -1077	-1010 -1017 -1025 -1033 -1040 -1048 -1055 -1063 -1070 -1078	-1 011 -1 018 -1 026 -1 033 -1 041 -1 048 -1 056 -1 063 -1 071 -1 079	-1011 -1019 -1027 -1034 -1042 -1049 -1057 -1064 -1072 -1079	-1012 -1027 -1027 -1035 -1042 -1057 -1055 -1072 -1080
1 150 • 0 1 151 • 0 1 152 • 0 1 153 • 0 1 155 • 0 1 156 • 0 1 156 • 0 1 159 • 0	-1081 -1088 -1096 -1103 -1111 -1118 -1126 -1131 -1148	=1.082 -1.089 -1.097 -1.104 -1.1.12 -1.1.126 -1.1.26 -1.1.34 -1.1.41 -1.1.49	-1.082 -1.090 -1.097 -1.105 -1.1.120 -1.127 -1.127 -1.135 -1.142 -1.150	-1083 -1091 -1098 -1106 -1121 -1128 -1135 -1143 -1150	-1084 -1091 -1099 -1106 -1114 -1121 -1129 -1136 -1144 -1151	-1085 -1092 -1100 -1107 -1115 -1122 -1129 -1137 -1144 -1152	-1085 -1093 -1108 -1115 -1123 -1138 -1138 -1138	-1 086 -1 094 -1 101 -1 109 -1 1-16 -1 124 -1 131 -1 138 -1 146 -1 153	-1087 -1094 -1102 -1109 -11107 -1124 -1132 -1139 -1147 -1154	-1088 -1095 -1110 -1118 -1125 -1140 -1147 -1155
1 160 • 0 1 161 • 0 1 162 • 0 1 163 • 0 1 164 • 0 1 165 • 0 1 167 • 0 1 169 • 0	-1156 -1163 -1171 -1178 -1185 -1193 -1200 -1208 -1215 -1223	-1156 -1164 -1177 -1177 -1186 -1190 -1208 -1208 -1223	-1157 -1165 -1172 -1179 -1187 -1194 -1202 -1209 -1217 -1224	-1158 -1165 -1173 -1180 -1188 -1195 -1203 -1217 -1225	-1159 -1166 -1174 -1188 -1196 -1203 -1211 -1218 -1226	-1159 -1167 -1174 -1182 -1189 -1197 -1204 -1211 -1219 -1226	-1160 -1168 -1175 -1180 -1197 -1205 -1212 -1227	-1 161 -1 168 -1 176 -1 183 -1 191 -1 198 -1 206 -1 213 -1 220 -1 228	-1162 -1167 -1177 -1184 -1191 -1206 -1221 -1221	-1162 -1170 -1177 -1185 -1192 -1200 -1214 -1222 -1229
1 170.0 1 171.0 1 172.0 1 173.0 1 174.0 1 175.0 1 176.0 1 177.0 1 178.0	-1230 -1237 -1245 -1252 -1260 -1267 -1274 -1282 -1296	-1231 -1238 -1243 -1250 -1260 -1275 -1280 -1280 -1297	-1231 -1239 -1246 -1261 -1268 -1276 -1278 -1291	-1232 -1240 -1247 -1254 -1262 -1269 -1277 -1284 -1291 -1299	-1233 -1240 -1248 -1255 -1263 -1270 -1277 -1278 -1292 -1299	-1234 -1241 -1248 -1263 -1271 -1271 -1275 -1285 -1293 -1300	-1234 -1242 -1249 -1257 -1264 -1271 -1279 -1286 -1294 -1301	-1 235 -1 243 -1 250 -1 257 -1 265 -1 272 -1 280 -1 287 -1 294 -1 302	-1236 -1243 -1251 -1258 -1253 -1273 -1280 -1295 -1302	-1237 -1244 -1259 -1259 -1266 -1274 -1281 -1288 -1303
1 180.0 1 181.0 1 182.0 1 183.0 1 185.0 1 185.0 1 185.0 1 186.0 1 189.0	-1304 -1311 -1319 -1326 -1333 -1341 -1348 -1353 -1370	-1305 -1312 -1319 -1327 -1334 -1349 -1356 -1371	-1305 -1313 -1327 -1327 -1335 -1342 -1342 -1357 -1364 -1371	-1306 -1313 -1328 -1328 -1335 -1343 -1350 -1357 -1365 -1372	-1307 -1314 -1329 -1336 -1343 -1358 -1358 -1365 -1373	-1307 -1315 -1326 -1337 -1344 -1359 -1366 -1373	-1308 -1316 -1323 -1330 -1338 -1345 -1352 -1360 -1367 -1374	-1 309 -1 316 -1 324 -1 331 -1 338 -1 346 -1 360 -1 368 -1 375	-1310 -1317 -1324 -1332 -1339 -1346 -1354 -1361 -1368 -1376	-1310 -1318 -1325 -1332 -1347 -1354 -1362 -1369 -1376
1 190.0 1 191.0 1 192.0 1 193.0 1 194.0 1 196.0 1 196.0 1 196.0	1377 1384 1399 -1399 -1406 -1414 -1428 -1433	-1378 -13852 -1390 -1407 -1412 -1429 -1429 -1433	-1379 -1386 -1393 -1408 -1415 -1422 -1430 -1444	-1379 -1387 -1394 -1401 -1409 -1416 -1423 -1438 -1445	-1380 -1387 -1387 -1402 -1409 -1417 -1421 -1431 -1446	-1381 -1388 -1395 -1403 -1410 -1417 -1425 -1439 -1446	-1382 -1389 -1396 -1403 -1411 -1418 -1423 -1440 -1447	-1 382 -1 397 -1 404 -1 411 -1 419 -1 426 -1 433 -1 441 -1 448	-1383 -1398 -1398 -1402 -1419 -1427 -1424 -1444	-1384 -1398 -1398 -1406 -1413 -1427 -1427 -1435 -1442

TABLE VII - Concluded

P, mb	.0.	, Ī	2	3	4	5	6	7 =	8	9
1200 • 1210 • 1220 • 1230 • 1250 • 12	-1522 -1594 -1666 -1736 -1807 -1877 -1946 -2016 -2084	-1457 -1530 -1601 -1673 -1744 -1814 -1884 -1953 -2091	-1464 -1537 -1608 -1680 -1751 -1821 -1891 -1890 -2029 -2098	-1472 -1544 -1616 -1687 -1758 -1828 -1898 -1997 -2036 -2105	-1479 -1551 -1623 -1694 -1765 -1835 -1905 -1974 -2043 -2112	-1486 -1558 -1630 -1701 -1772 -1842 -1912 -1981 -2050 -2118	-1493 -1565 -1637 -1708 -1779 -1849 -1918 -2057 -2125	-1501 -1573 -1644 -1715 -1786 -1856 -1926 -1995 -2064 -2132	-1508 -1580 -1651 -1722 -1793 -1863 -1933 -2002 -2071 -2139	-1515 -1587 -1658 -1729 -1800 -1870 -1940 -2007 -2146
1300 • 1310 • 1320 • 1330 • 1350 • 1360 • 1370 • 1380 • 1390 •	-2153 -1220 -1220 -1220 -1220 -1221 -1225 -1255 -1261 -1264 -1274	-21.59 -22.94 -23.61 -24.28 -24.94 -25.625 -26.25 -26.70 -27.55	-2166 -2234 -2368 -2435 -2435 -2566 -26697 -2761	-2173 -2241 -2308 -2375 -2441 -2507 -2573 -2638 -2703 -2768	-2180 -2247 -2347 -2381 -2448 -2514 -2514 -2645 -2710 -2774	-2186 -2254 -2254 -2388 -2454 -2586 -2651 -2716 -2780	-2193 -2261 -2328 -2395 -2461 -25593 -2659 -2723 -2787	-2268 -2268 -2355 -2468 -2559 -2664 -27793	-2274 -2274 -2274 -2408 -2474 -2506 -2671 -2735 -2800	-2214 -2281 -2348 -2415 -2481 -2542 -2612 -2677 -2742 -2806
1400 • 1410 • 1420 • 1430 • 1450 • 1460 • 1480 • 1490 • 14	-2813 -2876 -2940 -3003 -3066 -3128 -3190 -3252 -33514 -3375	-2819 -2883 -2946 -3009 -3072 -3135 -3197 -3258 -3320 -3381	-2825 -2889 -2953 -3016 -3078 -3141 -3203 -3265 -3387	-2832 -2896 -2959 -3085 -3147 -3209 -3332 -3393	-2838 -2902 -2965 -3021 -3021 -3153 -3217 -32338 -3399	-2845 -2908 -2972 -3035 -3097 -3159 -3283 -3344 -3405	-2851 -2915 -2978 -3041 -3103 -3166 -3228 -3289 -3350 -3411	-2857 -2921 -2984 -3047 -3170 -3172 -3234 -3295 -3356	-2864 -2927 -2927 -3053 -3116 -3176 -3240 -3361 -3363 -3423	-2870 -2934 -2997 -3060 -3122 -3184 -3208 -3369 -3469
1500 1510 1520 1530 1550 1550 1560 1570 1580 1590	-3435 -3496 -3556 -3616 -3675 -3734 -3793 -3852 -3910 -3968	-3442 -3562 -3562 -3681 -3740 -3799 -3958 -3916 -3974	-344B -3506 -3568 -3568 -3687 -3746 -3805 -3862 -3980	-3454 -3514 -3574 -3693 -3752 -3811 -3869 -3987 -3985	-3460 -3520 -3540 -3649 -3758 -3875 -3875 -3933 -2991	-3466 -3526 -3526 -3646 -3705 -3764 -3823 -3881 -3939 -3997	-3472 -3532 -3532 -3652 -3711 -3770 -3887 -3887 -3945 -4003	-3478 -3538 -3538 -3657 -3717 -3776 -3893 -3951 -4008	-3484 -3544 -3663 -3723 -3782 -3898 -3956 -4014	-3490 -3550 -3550 -3669 -3729 -3787 -3904 -3962 -4020
1600 • 1610 • 1620 • 1630 • 1660 • 1670 • 1680 • 1690 • 16	-4026 -4083 -41497 -4153 -4316 -4421 -4421 -4432	-4031 -4089 -4146 -4203 -4203 -4315 -4371 -4427 -4482 -4537	-4037 -4094 -4198 -4208 -4265 -4321 -4377 -4438 -4543	-4043 -4100 -4157 -4214 -4270 -4326 -438 -4493 -4548	-4049 -4106 -4119 -4216 -4338 -43483 -4499 -4554	-4054 -4112 -4125 -4282 -4388 -4393 -4399 -4509	-4060 -4117 -4117 -4231 -4287 -4343 -4399 -4354 -4510	-4066 -4123 -4180 -4293 -4349 -4405 -4460 -4515 -4570	-4072 -4129 -4186 -4242 -4298 -4354 -4410 -4466 -4521 -4576	-4077 -4134 -4191 -4248 -4360 -4360 -4471 -4526 -4581
1700 • 1710 • 1720 • 1730 • 1750 • 1750 • 1750 •	-4587 -4641 -4696 -4750 -4857 -4857 -4911 -4964	-4592 -4647 -4701 -4755 -4809 -4863 -4916 -4969	-4598 -4652 -4706 -4761 -4868 -4921 -4974	-4603 -4558 -4712 -4766 -4820 -4873 -4927 -4980	-4609 -4663 -4717 -4771 -4825 -4879 -4932 -4985	-4614 -4668 -4723 -4777 -4830 -4884 -4937 -4990	-4619 -4674 -4728 -4782 -4836 -4889 -4942 -4995	-4625 -4679 -4734 -4787 -4841 -4895 -4948	-4630 -4685 -4739 -4793 -4846 -4900 -4953	-4636 -4690 -4744 -4798 -4852 -4905 -4958

Table VIII

GEOPOTENTIAL ALTITUDE IN METERS AS A FUNCTION OF PRESSURE IN MILLIMETERS OF MERCURY

668502 O - 63 - 17

TABLE VIII

GEOPOTENTIAL ALTITUDE IN METERS as a f	function of PRESSURE IN I	MILLIMETERS OF MERCU	RY
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P, mm Hg.	0.00	0.04-	0.02	0.03	0.04	0.05	0.06	0.07	0,08	0.09
6.50 6.60 6.70 6.80	31909 31808 31709 31612	32001 31899 31798 31699 31602	31990 31889 31788 31690 31592	31980 31878 31778 31680 31583	31970 31 868 31768 31670 31573	31950 31858 31758 31660 31563	31949 31848 31749 31650 31554	31939 318 38 31739 31641 31544	31989 31 888 31789 31631 31535	31919 31818 31719 31621 31525
7.00 7.10 7.20 7.30 7.40 7.50 7.60 7.70 7.80	31515 31421 31327 31235 31145 31055 30967 30880 30794 30709	31506 31411 31318 31328 31136 31946 30971 30765 30701	31496 31402 31309 51217 31127 31037 30949 30863 30777 30692	31487 31393 31300 31208 31218 31029 30941 30854 30684	31477 31363 31299 31199 31109 31093 3093£ 30845 30675	31468 31374 31381 31190 31190 31191 30923 30837 30667	31458 31365 31272 31161 31091 31092 30915 30828 30659	31449 31355 31263 31172 31082 30993 30906 30820 30734 30650	31440 31346 31254 31163 31073 30984 30891 30726 30642	31430 31337 31245 31154 31064 30976 30888 30808 30808
8.00 8.10 8.10 8.30 8.40 8.50 8.60 8.60	30625 30461 30361 30361 30222 30145 30066 29992 299917	30617 30835 30835 30373 30293 30215 30060 29985 29910	30626 30526 30445 30365 30267 30129 30053 29902	30690 30518 30437 30357 30157 30159 30122 30045 29695	30552 30510 30429 30349 30349 30191 3014 30038 29962 2988	30584 30602 30421 30341 30262 30183 30166 30030 29955 29850	30576 30494 30413 30333 30254 30176 30099 30022 29947 29873	30567 30486 30485 30325 30326 30168 30091 30015 29940 29855	30559 30477 30397 30317 30238 30160 30083 30007 29932 29858	30551 30469 30389 30309 30153 30153 30076 30000 29925 29851
9.10 9.10 9.20 9.20 9.50 9.50 9.50	29843 29770 29698 29626 29555 29485 29416 29347 29279	29836 29753 29690 29619 29548 29478 29440 29373 29373	29626 29653 296612 29541 29402 29402 29334 29109	29821 29676- 29676- 29534 29564 29327 29327 29192	29814 29749 29697 29627 29638 29638 29638 29638 29638 29638	29734 29734 29734 29852 29856 29938 2993 2993 2992 299	29726 29726 29583 29583 29574 29576 29376 29376 29272	29792 29719 29546 29576 29576 29566 29360 29360 29166	29765 29712 29640 29669 29430 29361 29286 29189	29777 29703 29632 29492 29423 29384 29284 29289 29152

سنت

GEOPOTENTIAL ALTITUDE IN METERS as a function of PRESSURE IN MILLIMETERS OF MERCURY

P, mm Hg.	0.00	0.01	0.02	0.03	0.04	O.05	Ö.06	0.07	8 <u>0</u> .0	0.09
10.00 10.10 10.20 10.30 10.40 10.60 10.60 10.70 10.70 10.90	29146 29080 29015 28950 28887 28823 28761 28499 28638 28577	29139 29073 29008 28944 28817 28617 287593 28632 28632 28632	29137 290028 290028 289374 28811 287497 28625 28655	29126 29060 28995 28995 28968 28805 28742 28648 28619 28559	29119 29054 28989 289851 28798 28736 28736 28673 28653	29113 29047 28983 28983 288855 28792 28792 28730 28668 28667 28547	29106 29041 289912 289912 28549 28786 28786 286601 28541	29100 29034 28970 289906 28780 28780 28718 286595 28595 28535	29093 29028 28099 28036 28773 28773 28550 28589 28529	29087 29021 28957 28893 28830 28767 28705 28644 28583 28523
11.00 11.20 11.20 13.40 11.50 11.50 11.60 11.60	28517 28555. 28539 285281 28224 28110 28054 27999	2851-1 28451 28334 28334 28276 28216 28165 28165 28049 27993	285486 285486 285288 285270 285270 285270 280270 280270 280270 280270 280270 280270 280270 280270 280270 280270	28439 28532 28532 28264 28267 28150 28038 27982	28433 28433 28316 28236 28201 28144 28088 28032 27977	28487 28427 28310 28310 28133 28133 28133 28027 28027 27971	28481 28422 26305 26305 26247 28190 26133 28077 28021 27966	28415 284157 28299 28299 28241 28184 28187 28071 28071 28076 27960	28469 284101 28293 28235 28178 28178 28066 28010 27955	28463 28463 28345 28287 28230 28116 28060 28004 27949
12:00 12:10 12:20 12:20 12:40 12:40 12:40 12:40 12:40 12:40	27944 27635 27435 27782 27728 27676 27623 27572 27520 27469	27834 27834 27830 27776 27723 27670 27666 27515 275464	27939 27878 27878 277718 277613 275613 27510 27510 27459	27928 27873 27819 2786 27713 27660 27556 27556 27556	27922 27868 27814 27760 27707 27655 27653 27551 27500 27449	27917 27808 27808 27755 27702 27650 27597 27546 27494 27444	27911 27853 277503 27750 27697 27644 27592 27541 27489 27439	27906 27951 27798 27794 27691 27639 27537 27535 27484 27433	27900 27846 27739 27739 27686 27682 27582 27582 27582 27582	27895 27841 27767 27768 27689 27627 27627 27525 27474 27423
13.00 13.10 13.20 13.30 13.40 13.50 13.60 13.70 13.80 13.90	27418 27368 27369 27269 27280 27171 27123 27075 27027 26980	27413 27363 27313 27215 27215 27166 27118 27070 27022 26975	27408 27358 27259 27259 27210 27161 27113 27018 26970	27403 27353 27353 27254 27255 27156 27156 27060 27013 26966	27398 27348 27249 27249 27200 27152 27153 27056 27068 26961	27393 27343 27244 27195 27147 27147 27051 27003 26956	27388 27338 27339 27192 27192 27094 27094 27099 26999	27383 27333 27334 27234 27186 27137 27089 27041 26994 26947	27378 27328 27329 27229 27161 27132 27084 27036 26989 26942	27373 27323 27224 27225 27176 27127 27032 26964 26937
14.00 14.20 14.20 14.30 14.50 14.60 14.60 14.70	26733 26886 26840 26794 26793 26458 26414 26585	26928 26832 26835 26744 26699 26654 26659 26521	26927 26877 26735 26735 26739 26739 26649 26649 26661 26517	26919 26872 26826 26735 26735 26690 26645 26556 26556	26914 26868 26828 26828 26776 26730 26685 26685 26576 26558 26508	26909 26863 26877 26771 26775 26681 26636 26592 26594 26594	26905 26858 26812 26767 26721 26632 26632 26587 26587 26499	26900 26854 26808 268762 26717 26672 26527 26539 26495	26896 26849 26803 26758 25712 26667 26623 26578 26534 26490	26891 26845 26799 26753 26708 26863 26874 26874 26830 26486
15.20 15.20 15.20 15.40 15.60 15.60 15.50	26438 26395 26395 26395 26395 26268 26268 26184 26184 26101	26477 264391 263948 263048 26262 26282 26138 26138 26097	26473 26430 26344 26301 26357 26217 26174 26093	26469 26425 26382 26347 26297 26233 26132 26130 26089	26464 26421 26378 26378 26293 26251 26209 26167 26126 26085	26460 26417 26374 26374 26389 26247 26205 26163 26162 26081	26456 26412 26370 26327 26285 26242 26261 26159 26118 26077	26451 26408 26365 26323 26280 26238 26197 26155 26114 26073	26447 26404 26361 26318 26276 26234 26131 26131 26130 26069	26443 26400 26357 26314 26272 26238 26147 26104 26965
16.00 16.10 16.20 16.30 16.40 16.50 16.70 16.70	26020 25940 25940 25940 25940 25821 25782 25743 257704	26057 26016 25976 25936 25856 25817 25778 25778 25779 25770	26052 26012 25972 25972 25892 25813 25774 25774 25696	26048 26008 25968 25968 25888 25848 25809 25770 25771 25693	26004 26004 25924 25924 25824 25824 25825 25727 25689	26040 26000 25940 25940 25840 25840 25841 25762 25763 25685	25996 25996 259916 25836 25797 25778 25728 25728	26992 25992 25992 25912 25872 25873 25794 25716 25677	26028 25948 25948 25968 25829 25789 25781 25713	255944 255944 255944 2558625 2558747 25547777 256
7.00 17.10 17.20 17.30 17.30 17.40 17.40 17.40	25464 25650 25650 25650 25477 25440 25440 2530 2530	25624 25624 25625 25646 25673 25475 25400 25327	25658 25620 25544 25507 25547 25473 25399 25389 25389	25654 25616 25576 25573 25563 25466 25429 25356 25319	25650 25612 25575 25537 25500 25462 25425 25425 25389 25389 25369	256479 255571 255533 25496 254459 254455 25345 25345 25345 25345	25643 255667 25529 25529 25455 25418 25345 25345 25345	25601 25601 25556 25548 25548 25541 25520 25520 25520	25697 25558 25558 25588 255441 25573 25573 25573 25573 25573	25631 25593 25596 25518 25481 254407 25370 25334 25298
18.00 18.20 18.30 18.30 18.30 18.30 18.30	25294 25292 25222 25131 25134 25041 25042 24977	25290 25255 25219 25183 25113 25178 25078 25008 24974	25251 25251 252160 25169 25109 25005 25005 24970	25263 25247 25212 25141 25106 25001 25001 24967	25244 25244 25275 25173 25102 25033 24754 24754	25276 25240 253169 251199 250054 250059 224995 249960	25272 25201 25206 25130 25096 25096 25096 24997	2529 25297 251162 251057 2550957 2550985 244955	25265 25229 25174 25152 25163 25053 25053 25053 24964 24950	25242 25246 25190 25195 25190 25080 25080 25015 24947
19.00 19.20 19.30 19.40 19.50 19.70	24909 24909 24802 24808 24708 24708 24708 24708 24708	24906 24906 24872 24838 24773 24738 24735 24752 24672 24672	24485 24485 24485 2447 2447 2447 2445 2447 2445 2445 244	24859 24865 24861 248748 24748 24748 24752 24664 24653	248628 248628 248761 244761 244663 24663 24653	248525 248525 248525 248752 248752 24852 24852 24852 24852	248551 248551 24487752 24477652 244652 244652	24852 24852 24858 24755 24751 24685 24653 24653	24484 24484 24471 24476 24465 24465 24465 24465	24879 24879 248718 24778 24778 247745 24464 24644 24644

GEOPOTENTIAL ALTITUDE IN METERS as a function of PRESSURE IN MILLIMETERS OF MERCURY

P, mm Hg	0.0	0.1	0.2	0.3	0.4	0.5	0:6	0.7	0,8:	Ó.9
20.00 21.00 22.00 24.00 25.00 27.00 28.00	24611 24295 23994 23707 23433 23170 22916 22676 22417	24578 24264 23965 23679 23406 23144 22893 22652 22419 22195	24546 24234 23936 23651 23380 23119 22869 22628 22397 22173	24514 24203 23907 23624 23353 23093 22844 22605 22374 22151	24482 24173 23878 23578 23597 23068 22820 22581 22551 22130	24451 24143 23849 23559 23300 23043 227558 22258 22108	24419 24113 23821 23541 23541 23018 22771 22534 22306 22086	24388 24083 23792 23514 23248 22993 22747 22511 22284 22065	24357 24053 23764 23487 23222 22968 22723 22488 22262 22043	24326 24024 23735 23196 23196 22943 22943 22465 222439 222439
30.0 31.0 32.0 33.0 34.0 35.0 37.0 38.0	22000 21790 21598 21391 21201 21016	21979 21770 21568 21372 21382 20999 20645 20476 20311	21958 21749 21548 21563 21960 209801 209459 200459 20295	21936 21729 21528 21333 21145 20961 20784 20611 20442 20279	21915 21708 21508 21514 21126 20943 20766 20594 20426 20263	21894 21688 21488 21495 21197 20925 20749 20747 20409 20247	21873 21668 21469 21276 21089 20908 20731 20560 20393 20230	21853 21648 21449 21457 21071 20871 20714 20543 20376 20214	21628 21628 21438 21438 21257 2067 2068 2068 2068 2068 2069 2069	21817 21867 21867 21819 21819 21857 20504 20504 20504 20504 20504 20504
40.00 42.00 43.00 45.00 45.00 45.00 47.00 48.00	20167 20010 19857 19708 19562 19420 19280 19144 19010	20151 19995 198423 19843 19548 194067 19130 18987	20135 19979 19827 19679 19573 19392 19253 19117 18984	20119 19964 19812 19664 19519 19378 19239 19104 18971 18841	20104 19948 19797 19649 19505 19364 19225 19090 18958 18828	20088 19933 19782 19635 196491 19350 19212 19217 18945 18815	20072 19918 19767 19620 19476 19336 19198 19063 18932 18802	20057 19903 19752 197606 19462 19322 19185 19050 18919 18790	20041 19887 1988 19591 19448 19308 19171 19037 18906 18777	20026 19872 19723 19577 19434 19294 19294 18893 18764
50000000000000000000000000000000000000	18752 18626 18503 18382 18263 18147 18033 17921 17910	18739 18614 18491 18370 18252 181326 18022 17909 17799 177691	18726 18601 18478 18358 18240 18124 18010 17898 17788	18714 18589 18466 18328 18113 17999 17887 17778 17670	18701 18576 18454 18334 18217 18101 17988 17976 17767 17659	18688 18564 18422 18422 18205 18097 1778 177648	18676 18552 18552 186311 18193 18078 17855 17854 17745 17638	18663 18540 18540 18699 18767 18767 17764 17764 177627	18651 18527 18527 18287 18170 18056 17943 17832 17723 17616	18638 18515 18394 18275 18159 18044 17932 17821 17713 17606
61 • 0 62 • 0 63 • • 0 65 • • 0 65 • • 0 65 • 0 65 • 0	17595 17490 17387 17286 17186 17188 16991 16896 16802 16709	17585 17480 17377 17376 17176 17176 17078 16981 16986 16792	17574 17470 17367 17366 17166 17068 16972 16877 16783 16691	17564 17459 17357 17256 17156 17059 16962 16677 16774	17553 27449 17347 17246 17147 17049 16953 16858 16764 16672	17543 17439 17336 17236 17137 17039 16943 16848 15755 16663	17538 17428 17426 17326 17127 17029 16934 16839 16746 16654	17522 17418 17316 17216 17117 17020 16924 16830 16737	17511 17408 17306 17206 17107 17010 16914 16820 16727 16636	17501 17398 17396 17196 17196 17097 17001 16905 16811 16716 16627
70.0 71.0 72.0 73.0 74.0 75.0 75.0 77.0 78.0	16618 16528 16439 16352 16265 16180 16096 16013 15932	16609 16519 16439 16439 16257 16178 16005 16005 15923	16500 16510 16422 16334 16163 16080 15997 15915	16591 16501 16413 16326 16326 16155 16071 15989 15987	16492 16492 16404 16317 16231 16146 16063 15980 15899 15819	16483 16483 16395 16396 16223 16138 16055 15072 15891	16364 16300 16214 16130 16046 15964 15883	15555 16466 16378 16291 16206 16121 16038 15956 15875 15795	16457 16457 16283 16197 16113 16030 15948 15867	16537 16448 16360 16274 16189 161022 15940 15859 15779
80.00 81.00 82.00 84.00 86.00 86.00 87.00 89.00	15771 15692 15614 15537 15466 15312 15239 15167 15095	156847 15687 15687 15534 154549 15332 15332 15188	15755 15679 15599 15524 15472 15278 15224 15181	15747 15669 15591 15515 15515 15439 15364 15290 15217 15174	15739 15661 15583 15587 15431 15357 15283 15210 15138	15731 25653 15576 155499 15494 15349 15276 15231 15059	15724 15645 155682 154916 15348 15348 151923 151923	15716 15638 15560 155464 15409 15334 15266 15116 15146	15708 15630 15533 155477 15401 15324 15181 15109 15038	15700 15622 15645 15469 15394 15324 15174 15102 15031
90 000 90 000 99 000 99 000 99 000 99 000 99 000 99 000	15024 14954 14885 14816 14768 14768 14615 14548 14420	15947 14977 14979 14774 14662 14578 14542 144573	15940 14871 148035 14765 147662 146036 14571 14407	15003 14933 14864 14798 14661 14595 14595 14595 1450	1 4996 1 4926 1 4857 1 4781 1 4781 1 4588 1 4588 1 4588 1 4594	14989 14919 14852 14715 14648 14516 14516 1458	14982 149143 14775 14761 14641 14575 14545 14381	14975 14905 14837 14769 14701 14635 14569 14503 14539 14375	14898 14898 14762 14695 14622 14622 14697 14632 1469	14892 14892 14823 14755 14688 14621 14556 14490 14426 14362
100.00 102.00 103.00 105.00 105.00 107.00 109.00	14356 14293 14230 14168 14107 14168 14107 13986 13927 13868 13809	14286 14286 14286 14162 14160 14080 13980 13981 13864	14343 14280 14218 14155 14034 13974 13916 13798	14337 14274 14212 14159 14028 13968 13969 13850 13792	14331 14268 14268 14144 14082 14082 13962 13962 13984 13786	14324 14261 14138 14077 14016 13957 13839 13780	14318 14455 14193 14132 14071 14071 13951 13833 13775	14312 14249 14185 14185 14065 14004 13985 13827 13769	14305 14243 14181 14119 14059 13998 13939 13880 13821 13763	14299 14237 14113 14052 13992 13973 13874 13815
110.00 112.00 113.00 113.00 115.00 116.00 117.00 118.00	13751 13694 13637 13581 13525 13470 13360 13366	13648 13648 13632 13875 13519 13464 13469 13355 13301	13740 13620 136270 13514 13459 13464 13349 13242	13734 13677 13684 13504 13508 13453 13458 13444 13290 13237	13728 13671 13615 13538 13503 13448 13493 13393 13285 13285	13723 13666 13609 13553 13472 13442 13387 13387 133279 13226	13717 13660 13603 13547 13437 13437 13382 13388 13274	13711 13654 13598 13542 13486 13431 13376 13322 13269	13705 136492 13536 13426 13426 13371 13263 13210	13700 13643 13586 13530 13475 13420 13312 13312 13258

TABLE VIII - Continued

GEOPOTENTIAL ALTITUDE IN METERS as a function of PRESSURE IN MILLIMETERS OF MERCURY

P, mm Hg	0.0	0.4	0.2	0.3	0.4	0.5	0.6	0,7	0.8	0,9
120.0 121.0 122.0 123.0 125.0 125.0 125.0 125.0	13200 13147 13043 12942 12941 12840 12790 12741	13194 13142 13098 13038 12936 12936 12835 12835 12785 12736	13137 13033 13033 12981 12931 12830 12830 12731	13184 13131 13079 13028 12976 12926 12875 12825 12776 12726	13179 13126 13074 13074 13082 12971 12921 12870 12820 12771 12721	13173 13121 13027 13017 12966 12915 12865 12815 12766 12716	13168 13116 13064 13012 12961 12960 12860 12810 12761	13163 13110 13059 13057 12956 12905 12955 12805 12756 12707	13158 13105 13053 13002 12951 12900 12850 12300 12751	13152 13100 13048 12997 12946 12895 12845 12795 12746 12697
130.0 131.0 132.0 133.0 135.0 136.0 137.0 138.0 139.0	12692 12643 12595 12597 12547 12560 12453 12406 12359 12313 12268	12687 12639 12590 12543 12448 12448 12401 12355 12309 12263	2682 12634 12538 12538 12490 12442 12397 12350 12304 12258	12677 12629 12581 12583 12486 12439 12392 12346 12300 12254	12673 12624 12528 12528 12481 12434 12341 12295 12249	1 2668 1 2619 1 2571 1 2524 1 2476 1 2429 1 2336 1 2336 1 2290 1 2245	12663 12616 12516 12519 12472 12475 12378 12378 12286 12240	12658 12610 12514 12514 12467 12420 12373 12327 12327 12381	12653 12605 12605 12509 12462 12415 12369 12323 12277 12231	12648 12600 12552 12505 12457 12411 12364 12318 12272 12227
140.0 141.0 142.0 143.0 144.0 145.0 146.0 147.0 148.0 149.0	12222 12177 12172 12088 12040 12040 11956 11956 11910 11870	12218 12172 12128 12083 12083 12039 11995 11995 11908 11865	12213 12168 12123 12079 12035 11991 11947 11904 11861	12209 12163 12119 12074 12030 11986 11943 11900 11857 11814	12204 12159 12114 12070 12026 11982 11939 11895 11853 11810	12065 12065 12071 11978 11934 11891 11848 11806	12195 12105 12061 12047 11973 11930 11887 11844 11801	12190 12146 12101 12057 12013 11969 11926 11883 11840 11797	12186 12141 12097 12052 12008 11965 11921 11878 11835 11793	12181 12137 12092 12048 12004 12960 11917 11674 11831 11789
150.0 151.0 152.0 153.0 155.0 156.0 156.0 159.0	11785 11701 11659 11618 11536 11495 11495 11415	11780 11696 11655 11614 11573 11532 11491 11451	11776 11734 11692 11651 11609 11568 11528 11487 11447 11447	11-772 11730 11688 11647 11605 11564 11524 11483 11443 11403	11768 11726 11684 11642 11601 11560 11520 11479 11479 11479	11763 11721 11680 11638 11597 11556 11516 11475 11435	11759 11717 11676 11634 11593 11552 11511 11431 11431	11755 11713 11671 11630 12589 11548 11507 11467 11467	11751 11709 11667 11626 11585 11544 11503 11463 11463	11747 11705 11663 11622 11581 11540 11499 11459 11419 11379
160.0 161.0 162.0 163.0 164.0 165.0 166.0 167.0 168.0	11375 11336 11256 11257 11219 11180 11142 11104 11108	11371 11332 11293 11254 11215 11176 11138 11100 11062 11024	11367 11328 11289 11250 11211 11172 11134 11096 11058	11363 11324 11285 11246 11207 11169 11130 11092 11055 11017	11359 11320 11281 11242 11203 11165 11127 11089 11051 11013	1:1355 1:1316 1:1277 1:1238 1:1399 1:161 1:123 1:1085 1:1047 1:1010	11352 11312 11273 11274 11196 11157 1119 11081 11043 11006	11348 11308 11269 11230 11192 11153 11115 11077 11040 11002	11344 11304 11265 11226 11168 11149 1-111 11073 11036 10998	11340 11300 11261 11223 11184 11146 11108 11070 11032 10995
170.0 171.0 172.0 173.0 174.0 175.0 176.0 177.0 178.0 179.0	10991 10954 10957 10880 10843 10806 10770 10734 10662	10987 10950 10976 10876 10839 10803 10766 10730 10694 10658	10983 10946 10909 10872 10836 10799 10763 10727 10691 10655	10980 10942 10905 10869 10832 10796 10759 10723 10687 10681	10976 10939 10902 10865 10828 10792 10756 10719 10683 10648	10972 10935 10841 10841 10825 10788 10752 10716 10680	10968 10931 10894 10858 10821 10785 10748 10712 10676 10641	10965 10928 10891 10817 10817 10781 10745 10749 10673 10637	10961 10924 10857 10850 10814 10777 10745 10669 10633	10957 10920 10883 10847 10810 10774 10737 10701 10666 10630
180.0 181.0 182.0 183.0 184.0 185.0 186.0 187.0	1.0626 1.0591 1.0555 1.0520 1.0485 1.0485 1.0481 1.0381 1.0346	10623 10587 10587 10517 10482 10447 10412 10377 10343	1.0619 10584 10588 10513 10478 10443 10408 10374 10339 10305	1 0616 1 0580 1 0545 1 0510 1 0475 1 0440 1 0405 1 0370 1 0336 1 0302	10612 10577 10541 10506 10471 10436 10401 10367 10333 10298	1 0 6 0 8 1 0 5 7 3 1 0 5 3 8 1 0 5 3 3 1 0 4 6 8 1 0 4 3 3 1 0 3 9 8 1 0 3 2 9 1 0 2 9 5	10605 10569 10534 10534 10499 10464 10429 10395 10360 10326 10291	10601 10566 10531 10546 10461 10426 10357 10322 10288	10598 105627 10527 10427 10457 10422 10388 10383 10319	10594 10559 10524 10489 10454 10419 10384 10350 10315
190.0 191.0 193.0 193.0 194.0 195.0 196.0 197.0	10278 10244 10216 10176 10143 10109 10076 10043 10009	10274 10240 10240 10173 10139 10106 10072 10039 10036 9973	10271 10237 10203 10169 10136 10102 10069 10069 10003	10268 10234 10200 10166 10132 10099 10066 10033 10000	10264 10230 10196 10163 10129 10096 10062 10062 10069 9996	10261 10227 10193 10199 10126 10092 10059 10026 9993 9960	10257 10223 10190 10196 10122 10089 10023 10023 9990 9957	10254 10220 10166 10153 10119 10086 10052 10019 9986 9954	10251 10217 10183 10149 10146 10082 10049 10046 9983 9950	10247 10213 10179 10179 10146 10112 10079 10046 10013 9980 9947
00000000000000000000000000000000000000	9944 9911 9876 9814 97180 9718 9655	9941 9908 9875 9843 9811 9777 9715 9651	9937 9905 9872 9840 9808 9775 9743 9712 9648	9934 9901 9869 9837 9804 9772 9740 9708 9645	9931 9898 9866 9833 9801 9769 9737 9774 9674	9927 9895 9862 9830 98766 9734 9734 9670 9639	9924 9892 98827 9827 9795 9731 9639 9636	9921 9888 9856 9854 9759 9759 9728 9664 9633	9918 9885 9853 9850 9756 9756 9754 9693 9661 9629	9914 9882 9849 9817 9785 9753 9753 97689 9689 9658
210.00 2112.00 2113.00 2113.00 2113.00 2113.00	95569 95569 955957 95436 9436 9436 9436 9934	9629 9557 9556 9556 9463 9463 9472	9617 9584 9584 9582 9481 9461 9460 9339	9614 9582 9551 9520 9489 9458 9427 9366 9336	9611 9579 9548 9517 9455 9455 9454 9394 9383	9607 9576 9545 9543 9452 9452 9452 9350 9350	9604 9573 9542 9541 9489 9418 9357 9357	9601 9570 9539 9507 9446 9415 9354 9354	9598 9567 9536 9536 9474 9443 9412 9351 9351	9595 9564 9532 9501 9470 9440 9409 9378 9348 9318

P, mm Hg	0.0	³ 0.1	0.2	0.3	0.4	Õ, 5	0.6	0.7	0.8	0.9
220.0 221.0 221.0 223.0 223.0 2225.0 2225.0 227.0 2228.0	9315 9284 9254 9224 9194 9164 9135 9105 9076	931.2 9261 9251 9221 9191 9102 9132 9102 9073 9043	9278 9278 9248 9218 9188 9159 9129 9070 9070	9305 9275 9245 9215 9185 9186 9196 9096 9067 9038	9272 9272 9242 9212 9182 9183 9183 9093 9064 9035	9299 9269 9239 9279 9150 9150 9061 9061 9032	9296 9266 9206 9206 9147 9147 9088 9029	9293 9263 9233 9273 9173 9144 9114 9055 9055	9290 9260 9230 9200 9170 9141 9111 9082 9052 9023	9£87 9£57 9£57 91£7 9167 9138 9079 9049 9020
230.0 231.0 233.0 233.0 235.0 235.0 235.0 237.0 237.0	9017 8988 8989 8930 8901 8872 8844 8815 8758	9014 8985 8956 8957 8869 8841 8812 8784	9011 8962 8953 8954 6867 8867 8838 8809 8761 8753	9008 8979 8950 8921 8892 8864 8835 8807 8778 8750	9005 8976 8947 8918 8990 8861 8832 8804 8775 8747	9003 8973 8944 8916 8867 8858 8829 8829 8772 8744	9000 8971 8971 8981 8884 8885 5827 8770 8770	8997 8968 8939 8910 8852 8852 88795 8767 8738	8994 8965 8936 8907 8873 8849 8821 8792 8764 8736	\$991 8933 8933 8904 8875 8847 8818 8769 8761 8733
240.0 241.0 243.0 243.0 245.0 245.0 245.0 247.0 247.0	8730 8702 8674 8648 8618 8590 8562 8537 8480	8727 8699 8671 8643 8615 8587 8587 8560 8532 8504 8477	8724 8696 8668 8640 8585 8585 8557 8529 8502 8474	8722 8693 8665 8637 8610 8582 8554 8526 8526 8499 8472	8719 8661 8663 8635 8607 8579 8551 8524 8496 8469	8716 8688 8360 8632 8634 8576 8349 8349 8493 8466	8713 8685 8687 8629 8601 8573 8546 9518 8491 8463	8710 8682 8654 8654 8598 8571 8543 8515 8488 8461	9707 9679 8651 8653 8596 8568 8540 8513 8485 8456	8705 8647 8647 8593 8565 8538 85310 8483 8455
250.0 251.0 253.0 253.0 253.0 255.0 256.0 257.0 257.0	8452 8425 8398 8371 8344 8317 8290 8237 8210	8450 8422 8395 8368 8341 8314 8287 8261 8234 8238	8447 8420 8393 8339 8339 8335 8285 8285 8231 8205	8444 8417 8390 8363 8309 8282 8285 8289 8282	8442 8414 8387 8360 8303 8306 8279 8253 8226 8200	8459 8412 8384 8330 8304 8277 8250 8278	8436 8409 8382 8385 8301 8274 8247 8221 8194	8433 8406 8379 8355 8298 8271 8245 8218 8192	8431 8403 8376 8349 8382 8296 8269 8269 8269 8269	8428 8401 8374 8327 8320 8293 8266 8239 8213 8186
261.00 263.00 263.00 265.00 265.00 265.00 266.00 266.00 268.00	0184 8157 8131 8105 8079 8052 8001 7975 7949	-3181 8155 8128 8102 8076 8024 7998 7998 7946	8178 8152 8126 8099 8073 8047 8021 7995 7970 7944	8176 8149 8123 8097 8071 8045 8019 7993 7967	8173 8147 8120 8094 8068 8042 8016 7990 7964 7939	8170 8144 6118 8092 8065 8039 8013 7988 7962 7936	8168 81415 81415 8089 80637 8011 7985 7933	8165 8139 8113 8086 8060 8034 8008 7982 7957 7931	8163 8136 8110 8084 8058 8032 8006 7980 7954 7928	8160 8134 8107 8081 8085 8085 8003 7977 7951 7926
270-0 271-0 272-0 273-0 275-0 276-0 276-0 277-0 278-0	7929 7898 7872 7847 7841 7796 7771 7745 7720 7695	7921 7895 7869 7844 7819 7793 7768 7743 7718 7693	7918 7892 7867 7841 7841 7791 7765 7740 7715 7690	7916 7890 7864 7839 7814 7788 7763 7738 7713 7688	7913 7887 7862 7836 7811 7786 7761 7735 7710 7685	7910 7885 7859 7834 7809 7783 7758 7733 7708 7683	7908 7882 7857 7831 7806 7781 7756 7730 7705 7680	7905 7880 7854 7829 7803 7778 7753 7728 7703 7678	7903 7877 7852 7826 7801 7776 7751 7755 7700 7675	7900 7875 7649 7849 7824 7773 7748 7773 77498 7673
250 • 0 251 • 0 252 • 0 253 • 0 255 • 0 255 • 0 257 • 0 259 • 0	7670 7646 7621 7596 7571 7547 7522 7498 7473 7449	7668 7643 7618 7594 7569 7544 7520 7495 7471 7447	7665 7641 7616 7591 7566 7542 7517 7493 7469 7444	7663 7638 7613 7589 7564 7539 7515 7490 7466 7442	7660 7636 7611 7586 7561 7537 7512 7488 7464 7439	7658 7633 7608 7584 7559 7534 7510 7486 7461 7437	7655 7631 7606 7581 7557 7532 7508 7483 7483 7483 7435	7653 7628 7603 7579 7554 7530 7505 7481 7456 7432	7651 7626 7601 7552 7552 7527 7503 7478 7454 7430	7648 7623 7598 7594 7549 7525 7500 7476 7452 7427
290.0 291.0 292.0 293.0 294.0 296.0 296.0 297.0 299.0	7425 7401 7377 7352 7329 7305 7281 7257 7233 7210	7422 7398 7374 7350 7356 7302 7278 7255 7251 7207	7420 7396 7372 7348 7324 7300 7276 7252 7252 7259 7205	7418 7393 7369 7345 7321 7297 7274 7250 7256 7203	7415 7391 7367 7343 7319 7295 7271 7267 7224 7200	7413 7389 7365 7340 7317 7293 7269 7245 7221 7198	7410 7386 7362 7338 7314 7290 7266 7243 7219 7195	7408 7384 7360 7336 7312 7288 7264 7240 7217 7193	7405 7381 7357 7353 7309 7286 7262 7262 7238 7214 7191	7403 7379 7355 7331 7307 7283 7259 7236 7212 7188
300.0 301.0 302.0 303.0 304.0 305.0 307.0 308.0	7186 7162 7139 7116 7092 7069 7046 7023 7000 6977	7184 7160 7137 7113 7090 7067 7043 7020 6997 6974	7181 7158 7134 71:11 7088 7064 7041 7018 6995 6972	71 79 71 55 71 32 71 09 70 65 70 62 70 39 70 16 6993 6970	71-777 71-53 71-30 71-30 70-63 70-60 70-37 70-13 69-90 69-67	71.74 71.51 71.27 71.04 70.51 70.57 70.11 6988 6965	7172 7148 7125 7102 7078 7055 7055 7009 6986 6963	7170 7146 7123 7099 7076 7053 7030 7006 6983 6960	7167 7144 7120 7097 7074 7050 7027 7004 6981 6958	7165 7141 7118 7095 7071 7048 7025 7002 6979 6956
310.0 312.0 312.0 313.0 314.0 315.0 316.0 316.0	6954 6931 6908 6865 6862 6840 6817 6794 6772 6749	6951 6928 6906 6863 6867 6615 6777 6777	6949 6926 6903 6858 6835 6612 6790 6767	6947 6924 6901 6878 6855 6833 6810 6788 6765 6743	6944 6921 6899 6876 6853 6831 6808 6785 6763 6741	6942 6919 6896 6851 6828 6826 6763 6761 6738	6940 6917 6891 6871 6849 6825 6803 6781 6758	6938 6915 58969 5846 6824 68779 67755	6935 6912 6890 6844 6821 6776 6754 6732	6933 6910 6865 6842 6819 6774 6752 6729

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P, mm Hg	0.0	0.1	0.2	0.3	0.4	0,5	0,,6	0.7	0.8	0.9
320.0 321.0 323.0 323.0 324.0 325.0 326.0 326.0 326.0	6727 6682 6680 6618 6616 6594 6572 6550 6528	6725 6703 6680 6658 6636 6614 6592 6570 6548 6526	6723 6700 6678 6656 6634 6612 6590 6568 6546 6524	6780 6698 6676 6654 6631 6609 6587 6565 6543 6522	6718 6696 6651 6651 6629 6607 6585 6563 6541 6519	6716 6694 6671 6649 6627 6605 6583 6561 6539 6517	6714 6691 6669 6647 6625 6603 6559 6537 6515	671.1 4689 6645 6645 6623 6601 6557 6535 6513	6709 6665 6643 6680 6598 6596 6554 6554	6707 6685 6662 6618 6518 6574 6552 6530 6508
330.0 331.0 332.0 333.0 334.0 335.0 336.0 337.0 338.0	6506 6484 6463 6441 6419 6398 6376 6355 6355 6312	6504 6482 6461 6439 6417 6396 6374 6353 6331	6502 5480 6458 6437 6415 6394 6372 6351 6329 6308	6500 6478 6456 6435 6413 6391 6370 6348 6327 6306	6498 6476 64754 6432 6411 6389 6368 6345 6325	6495 6474 6452 6430 6409 6387 6366 6344 6323 6301	6493 6471 6429 6429 6407 6385 6364 6342 6321 6299	6491 6469 6426 6404 6383 6361 6340 6319 6297	6359 6336 6316 6295	6487 6465 6422 6400 6379 6336 6336
340 + 0	6291 6270 6248 6227 6206 6185 6164 6173 6122 6101	5289 5267 6225 6225 6204 6162 6162 6142 6099	6287 6285 6243 6202 6181 6160 6139 6118 6097	6284 6263 6221 6200 6179 6158 6137 6116 6095	6282 6261 6261 6219 6198 6177 6156 6135 6114 6093	6280 6259 6259 6217 6196 6195 6154 6132 6132 6091	6278 6257 0236 6215 6193 6175 6151 6150 6110 6089	6276 6255 6232 6232 6191 6170 6179 6128 6108 6087	6274 6253 6231 6230 6189 6168 6147 6126 6105 6085	6272 6250 6229 6208 6187 6166 6145 6124 6103 6083
350.0 351.0 352.0 353.0 354.0 356.0 356.0 357.0 358.0	6080 6060 6039 6018 5998 5977 5957 5936 5916	6078 6058 6037 6016 5995 59954 5934 5934 5893	6076 6056 6035 6014 5994 5973 5952 5932 5932 5912 5891	6074 6053 6033 6012 5991 5971 5950 5930 5930 5989	6072 6051 6031 6010 5989 5948 59257 5887	6070 6049 6049 6008 5987 5946 5925 5885	6068 6047 6026 5985 5960 5944 5903 5883	6066 6045 6024 6024 5963 5963 5942 5942 5901 5881	6064 6043 6022 5981 5961 5940 5920 5899 5879	6062 6041 6020 4000 5979 5959 5918 5918 5897 5877
360 + 0 361 + 0 362 + 0 362 + 0 364 + 0 365 + 0 365 + 0 367 + 0 368 + 0	5875 5855 5834 5814 5794 5774 5754 5734 5714 5694	5873 5853 5832 5812 5792 5772 5752 5752 57692	5871 5851 5830 5810 5790 5770 5750 5730 5710 5690	5869 5848 5828 5808 5789 5768 5748 5748 5728 5708 5668	5867 5846 5826 5806 5786 5766 5746 5726 5706	5865 5844 5804 5784 5784 5744 5724 5684	5863 5842 5822 55782 5762 5742 5722 5763	5861 5840 5820 5800 5780 5760 5740 5720 5700 5680	5859 5836 5818 5788 5778 5758 5738 5718 5698 5678	5857 5836 5816 5716 5776 5736 5736 5716 5696 5676
370.0 371.0 372.0 373.0 374.0 375.0 375.0 375.0 375.0	5674 5654 5634 5614 5595 5575 5555 5536 5516 55497	5672 5652 5612 5593 5553 5553 5554 55495	5670 5650 5630 5610 5591 5571 5551 5532 5512 5493	5668 5648 5628 5609 5589 5569 5550 5510 5510 5491	5666 5646 5626 5607 5587 5548 5528 5508 5489	5664 5644 5624 5605 5565 5565 5546 5506 5487	5662 5642 5623 5583 5563 5544 5525 5485	5660 5640 5680 5581 5561 5542 5503 5483	5658 5638 5618 5519 5579 5559 5559 5550 5520 5520 5501 5481	5656 5636 5616 5597 5577 5557 5518 5518 5499 5479
380 • 0 381 • 0 383 • 0 384 • 0 385 • 0 386 • 0 387 • 0 389 • 0	5477 5458 5438 5419 5400 5360 5361 5342 5323	5475 5456 5436 5417 5398 5379 5359 5340 5321 5302	5472 5454 5435 5415 5396 5397 5357 5358 5319 5300	5471 5452 5433 5413 5394 5375 5356 5336 5317 5298	5469 5450 5431 5411 5392 5375 5354 5315 5296	5468 5448 5429 5409 5390 5371: 5352 5332 5313 5294	5466 5446 5427 5427 5388 5369 5350 5331 5311 5292	5464 5444 5425 5406 5386 5387 5329 5310 5290	5462 5442 5423 5404 5384 5365 5346 5327 5308 5289	5460 5440 5421 5402 5382 5363 5345 5325 5326 5287
390.0 391.0 392.0 393.0 394.0 395.0 396.0 396.0 396.0	5285 -5266 -5247 -5228 -5209 -5171 -5152 -5134 -5115	5283 5264 52265 52207 5169 5150 5113	5261 5262 5243 5225 5186 5167 5149 5130 5111	5279 5260 5241 5223 5184 5166 51128 5109	5277 5258 5239 5230 5201 5182 5164 5145 5126	5275 5256 5237 5218 5199 5181 5162 5143 5124 5106	5273 5254 5236 5216 5198 5179 5160 5142 5104	5271 5252 5232 5215 5196 5177 5139 5121 5102	5270 5251 5251 5213 5194 5175 5137 5119 5100	5268 5249 5211 5211 5192 5173 5135 5135 5198
400.0 401.0 402.0 403.0 404.0 405.0 406.0 407.0 409.0	5096 5078 5059 5040 5022 5003 4985 4986 4948 4930	5094 5076 5039 5020 5020 4983 4965 4946	5092 5074 5055 5037 5018 5000 4981 4963 4944 4926	5091 5072 5053 5035 5016 4998 4979 4961 4943 4924	5089 5070 5052 5033 5014 4996 4978 4959 4941 4922	5087 5068 5050 5031 5013 4994 4976 4957 4939 4921	5085 5066 5049 5011 4992 4974 4937 4937	5083 5065 5047 5027 5009 4990 4972 4934 4935	5081 5063 5044 5026 5007 4989 4970 4952 4933 4915	5079 5061 5042 5024 5005 4987 4968 4950 4932 4913
410.0 411.0 412.0 413.0 413.0 415.0 415.0 415.0 415.0 415.0	4911 4893 4875 4857 4839 4820 4802 4784 4766 4748	4910 4891 4873 4855 4837 4819 4801 4782 4764	4908. 4890 4871 4853. 4835 4817 4799 4781 4763 4745	4906 4888 4869 4851 4833 4815 4779 4779 4761 4743	4904 4886 4868 4849 4831 4813 4795 4777 4759 4741	4902 4884 4866 4848 4829 4811 4793 4775 4757 4739	4900 4882 4864 4846 4828 4810 4791 4773 4755 4737	4899 4880 4862 4844 4826 4808 4790 4772 4754 4736	4897 4879 4860 4842 4824 4806 4788 4770 4752 4734	4895 4877 4859 4840 4804 4786 4760 4732

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É, mm Hg	0.0	·0:1	0.2	0:3	0,4	0.5	0.6	0.7	0.8	0.9
420.0 421.0 422.0 423.0 423.0 425.0 426.0 427.0 428.0	4730 4712 4694 4677 4659 4641 4623 4606 4508 4570	4729 4711 4693 4675 4639 4639 4622 4686 4586	4727 4709 4691 4675 4655 4637 4602 4584 4567	4725 4707 4689 4671 4633 4636 4618 4600 4583 4565	4723 4705 4687 4652 4634 4616 4581 4563	4721 4703 4686 4650 4650 4632 4614 4597 4579 4561	4720 4702 4684 4646 4648 4630 4613 4595 4577 4560	4718 4700 4682 4664 4646 4629 4611 4593 4576 4558	4716 4698 4680 4662 4645 4627 4609 4591 4574 4556	4714 4696 4678 4661 4643 4625 4607 4590 4572 4554
430.0 431.0 432.0 433.0 435.0 436.0 436.0 436.0 438.0	4555 4517 4517 4502 4465 4448 4413 4396	4553 4516 4598 4481 4446 4446 4421 6394	4549 4532 4514 4496 4479 4462 4444 4447 4409 4392	4547 4530 4512 4495 4477 4460 44425 4425 4408 4390	4546 4528 4510 4493 4458 4441 4406 4389	4544 4526 4509 4474 4456 4432 4404 4387	4524 4527 4482 4482 4485 4430 4430 4385	4540 4523 4505 4488 4470 4453 4438 4418 4401 4383	4539 4521 4503 4486 4469 4451 4434 4399 4382	4537 4519 4502 4484 4467 4449 4432 4415 4397 4380
440.0 441.0 442.0 443.0 443.0 445.0 446.0 447.0 448.0	4378 4361 4344 4327 4309 4292 4275 4258 4241 4224	4377 4359 4325 4308 4273 4256 4273 4259 4259	4375 4358 4340 4323 4306 4269 4272 4255 4238 4238	4373 4356 6339 4321 4304 4287 4270 4253 4236 4219	4371 4354 4337 4320 4303 4265 4268 4251 4234 4217	4370 4352 4335 4318 4301 4284 4267 4250 4233 4216	4368 4351 4353 4316 4299 4282 4265 4248 4231 4214	4366 4349 4332 4317 4280 4263 4263 4229 4212	4364 4347 4330 4313 4296 4279 4261 4227 4210	4363 4345 4328 4311 4294 4277 4260 4226 4209
450 ° 0 451 ° 0 453 ° 0 453 ° 0 454 ° 0 456 ° 0 456 ° 0 458 ° 0 459 ° 0	4207 4190 4173 4156 4139 4123 4106 4009 4072 4056	4205 4168 4171 4155 4138 4104 4067 4067 4054	4204 4187 4170 4153 4136 4119 4102 4086 4069 4052	4202 4185 4168 4151 4134 4118 4101 4084 4067 4051	4200 4183 4166 4150 4133 4116 4099 4082 4066 4049	4199 4182 4165 4148 4131 4114 4097 4081 4064 4047	4197 4180 4163 4146 4129 4113 4096 4072 4046	4178 4161 4144 4128 4111 4094 4077 4061 4044	4193 4177 4160 4143 4126 4109 4092 4076 4059 4042	4192 4175 4158 4141 4124 4107 4091 4074 4057 4041
460.0 461.0 462.0 463.0 464.0 465.0 466.0 467.0 469.0	4039 4022 4006 3989 3972 3956 3939 3923 3907 3890	4037 4021: 4004 3987 3971 3938 3921 3905 3888	4036 4019 4002 3986 3953 3953 3936 3920 3903 3887	4034 4017 4001 3984 3951 3934 3918 3902 3885	4032 4016 3999 3982 3986 3949 3933 3916 3900 3884	4031 4014 3997 3981 3964 3931 3915 3818 3882	4029 4012 3996 3979 3963 3943 3913 3813 3880	4027 4011 3994 3977 3961 3944 3928 3911 3895 3879	4026 4009 3992 3976 3959 3943 3926 3910 3893 3877	4024 4007 3991 3974 3958 3941 3925 3908 3892 3875
470.0 471.0 472.0 473.0 474.0 475.0 476.0 476.0 478.0 478.0	3874 3857 3841 3825 3808 3792 3776 3760 3744 3727	3872 3856 3839 3823 3807 3791 3774 3758 3746	3870 3854 3838 3821 3805 3789 3773 3767 3740 3724	3869 3852 3836 3820 3804 3767 3771 3755 3739 3723	3867 3851 3834 3818 3802 3766 3769 3753 3753 3753	3866 3849 3833 3817 3800 3784 3768 3752 3735 3719	3864 3848 3831 3815 3719 3782 3766 3750 3754 3718	3862 3846 3813 3813 3797 3781 3765 3748 3732 3716	3861 3844 3828 3812 3795 3779 3763 3747 3747 3731	3859 3843 3826 3810 3794 3778 3761 3745 3745 3729
480 • 0 481 • 0 482 • 0 483 • 0 485 • 0 485 • 0 486 • 0 486 • 0 487 • 0	3711 3695 3679 3663 3647 3631 3615 3599 3583 3567	371 0 3694 3678 3662 3646 3630 3614 3598 3582 3566	3708 3692 3676 3660 3644 3628 3612 3596 3580 3564	3706 3690 3674 3658 3642 3610 3594 3579 3563	3705 3689 3673 3657 3641 3625 3609 3593 3577 3561	3703 3687 3675 3655 3639 3623 3607 3591 3575 3560	3702 3686 3670 3658 3638 3622 3606 3570 3574 3558	3700 3684 3668 3652 3636 3620 3604 3588 3572 3556	3698 3682 3666 3650 3634 3618 3602 3587 3571 3555	3697 3681 3665 3643 3633 3617 3601 3585 3569 3553
490.0 491.0 492.0 493.0 494.0 495.0 496.0 497.0 498.0	3552 3536 3520 3504 3489 3473 3457 3441 3426 3410	3550 3534 3513 3513 3487 3471 3476 3440 3440 3409	3548 3553 3517 3501 3465 3470 3454 3438 3423 3407	3547 3531 3515 3500 3484 3468 3452 3437 3421 3406	3545 3530 3514 3498 3482 3467 3451 3435 3420 3404	3544 3528 3512 3496 3481 3465 3449 3434 3418 3402	3542 3526 3511 3495 3479 3463 3448 3432 3436 3416	3541 3525 3509 3493 3478 3462 3446 3430 3415 3399	3539 3523 3507 3492 3476 3460 3445 3429 3413 3398	3537 3522 3506 3490 3474 3459 3443 3427 3412 3396
500.0 501.0 502.0 503.0 504.0 505.0 506.0 506.0 509.0	3395 3379 3363 3348 3332 3317 3302 3286 3271 3255	3393 3377 3346 3346 3331: 3315 3300 3285 3269 3254	3391 3376 3360 3345 3329 3314 3299 3283 3268 3252	3390 3374 3359 3343 3328 3312 3297 3282 3266 3251	3368 3373 3357 3342 3326 3311 3295 3280 3265 3249	3387 3371 3356 3340 3325 3329 3294 3278 3278 3248	3385 3370 3354 3339 3323 3308 3292 3277 3262 3262 3246	3384 3368 3353 3337 3322 3306 3291 3275 3260 3245	3382 3367 3351 3336 3320 3305 3289 3274 3258	3361 3365 3350 3334 3319 3303 3258 3277 3257
510 • 0 511 • 0 512 • 0 513 • 0 514 • 0 515 • 0 516 • 0 517 • 0 518 • 0	3240 3225 3209 3194 3164 3149 3133 3118 3103	3239 3223 3208 3193 3197 3162 3147 3132 3117 3102	3237 3222 3206 3191 3176 3161 3145 3130 3115	3235 3220 3205 3190 3174 3159 3144 3129 3114 3099	3234 3219 3203 3188 3173 3158 3142 3127 3112	3232 3217 3202 3187 3171 3156 3141 3126 3111	3231 3216 3200 3185 3170 3155 3139 3129 31094	3229 3214 3199 3184 3168 3153 3138 3123 3108 3093	3228 3213 3197 3182 3167 3152 3136 3121 3106 3091	3226 3211 3196 3185 3150 3135 3120 3105 3089

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P, mm Hg	0,.0	0.1	0.2	-0.3-	~0\4 =	``O;5	0⊹6	:0.7 _s	0.8	-0.9
521-0 521-0 521-0 522-0 522-0 522-0 522-0 522-0 522-0 522-0 522-0 522-0	3073 3073 3058 3043 3028 3028 2298 2298 2298 2298 2298 2298	3076 3071 3056 3056 3026 3026 2981 2981 2967 2982	3070 3070 3055 3040 3010 2980 2980 2985 2985	3068 3053 3053 3023 3023 3008 2978 2978 2949	3082 3067 3057 3037 3022 3007 2992 2977 2962 2947	3080 3055 3055 3055 3005 3005 2990 2995 2961 2946	3079 3064 3049 3034 3019 3004 2974 2974 2944	3077 3062 3047 3032 3017 3002 2987 2972 2958 2943	3076 3061 3046 3031 3016 3001 2986 2971 2956 2941	3074 3059 3044 3029 3014 8998 2969 2955
530.0 531.0 532.0 533.0 535.0 536.0 536.0 537.0 539.0	2938 2928 2999 2594 2879 2864 2849 2820 2820 2805	2937 2922 2907 2892 2878 2863 2848 2833 2819 2819	2935 2920 2920 2891 2875 2861 2847 2817 2802	2934 2919 2889 2875 2860 2845 2830 2816 2801	2932 2913 2885 2873 2858 2858 2844 2829 2814 2800	2931 2916 2906 2986 2872 2857 2842 2842 2813 2798	2929 2914 2900 2885 2870 2855 2841 2826 2811 2797	2928, 2913, 2883, 2884, 2854, 2839, 2810, 2810, 2795	29262 28897 2882 2882 2852 2853 2853 2853 28794	2925 2910 2890 2890 2866 28516 2832 2832 28072
541.00 542.00 542.00 544.00 545.00 545.00 545.00 545.00 545.00	2751 27762 2762 2767 2732 2738 2703 2689 2674 2660	2789 2775 2760 2746 2731 2716 2702 2687 2673 2658	2788 27739 2759 2744 2729 2715 2700 2686 2657	2786 2772 2757 2753 2728 2714 2695 2685 2670 2656	2785 2776 2776 2741 2727 2698 2689 2689 2689	2769 2769 2754 2740 2745 2711 2696 2682 2667 2653	2782 2767 2753 2753 2738 2724 2709 2695 2680 2666 2651	2781 2751 2751 2737 2737 2708 2693 2679 2664 2650	2779 2764 2750 2735 2735 2721 2706 2692 2677 2663 2648	2778 2763 2748 2748 2719 2705 2690 2676 2661 2647
550.0 551.0 552.0 553.0 554.0 556.0 556.0 557.0 559.0	2645 2631 2617 2612 2588 2579 2545 2539 2545 2531	2644 2630 2615 2601 2587 2578 2578 2544 2529 2515	2643 2628 2619 2519 2516 2516 2554 2514	2641 2627 2612 2598 2598 2569 2555 2547 2512	2640 2625 2611 2597 2586 2584 2535 2535 2511	2638 2624 2610 2595 2581 2587 2552 25324 2509	2637 2622 2608 2579 2565 2551 2531 2522 2508	2635 26617 25592 25564 25549 25521 2507	2634 2605 2605 2572 2572 2548 25349 2505	2633 2618 2618 2589 2575 2561 2532 2518 2504
560.0 561.0 562.0 563.0 564.0 565.0 566.0 567.0 569.0	2502 2488 2476 2446 2446 2437 2403 2375	2501 2487 2473 2458 2458 2458 2416 2416 2416 2418 2374	2499 2485 2471 2457 2443 2429 2415 2401 2372	2498 2484 2470 2456 2457 2413 2413 2395 2385 2371	2497 2482 2464 2454 2440 2422 2398 2370	2495 2481 2463 2463 2419 2410 2398 2388	2494 2480 2465 2451 2437 2423 2409 2395 2381 2367	2492 2478 2450 2450 2436 2436 2408 2379 2365	2491 24763 2448 2448 2430 2406 23978 2364	2490 2475 2461 2447 2433 2419 2405 2391 2377 2363
570.0 571.0 572.0 573.0 574.0 575.0 576.0 577.0 579.0	2361 2347 2333 2319 2305 2276 2276 2264 2250 2236	2360 2346 2332 2318 2304 2290 2276 2262 2248 2235	- 2358 2344 23307 2317 2303 22875 2261 2243	2357 2343 2329 2315 2301 2287 2273 2260 2246 2232	2356 2342 2314 2314 2300 2286 2272 2258 2244 2230	2354 2340 23312 2298 22271 2257 2257 2229	2353 2339 2325 23117 2283 2269 2255 2228	2351 2352 2352 2352 2352 2352 2352 2354 2354	2350 2336 2326 2328 2294 2280 2260 2253 2239 2225	2349 2335 2321 2307 2293 2279 22651 2237 2224
580.0 581.0 582.0 583.0 584.0 585.0 587.0 587.0 589.0	2222 2208 2195 2181 2167 2153 2140 2126 21126 2199	2221 2207 2193 2179 2166 2152 2138 2125 2111 2097	2219 2206 2198 2198 2164 2137 2123 2110 2096	2218 2204 2190 2177 2163 2149 2135 2108 2094	2217 2203 2189 2175 2162 2148 2134 2120 2107 2093	2215 2201 2188 2174 2160 2133 2113 2115 2092	2214 2200 2186 2173 2159 2145 2131 2118 2104 2090	2212 2199 2195 2171 2157 2154 2130 2116 2103 2089	2211 2197 2184 2170 2156 2142 2129 2115 2101	2210 2196 2186 2155 2141 2114 2100 2086
590.0 591.0 592.0 593.0 594.0 595.0 596.0 597.0	2085 2071 2058 2044 2031 2017 2004 1990 - 1977 1963	2084 2070 2056 2043 2016 2002 1989 1975 1962	2082 2069 2055 2041 2028 2014 2001 1987 1974	2081 2067 2054 2040 2027 2013 1999 1986 1973 1959	2080 2066 2052 2039 2025 2012 1998 1985 1987 1988	2078 2065 2051 2037 2024 2010 1997 1983 1983	2077 2063 2056 2056 2002 2009 1995 1982 1968 1955	2075 2068 2035 2021 2008 1994 1981 1967	2074 2060 2047 2033 2020 2006 1993 1979 1966 1952	2073 2059 2046 2032 2018 2005 1991 1964 1951
600.0 601.0 602.0 603.0 604.0 606.0 607.0 608.0 609.0	1950 1936 1923 1929 1896 1883 1869 1856 1843	1948 1935 1921 1908 1895 1881 1868 1855 1841 1828	1947 1934 1920 1907 1893 1880 1867 1853 1853 1840	1946 1932 1919 1905 1892 1879 1865 1852 1859 1825	1944 1931 1917 1904 1891 1877 1864 1851 1837	1943 1930 1916 1903 1889 1876 1863 1849 1836	1942 1928 1915 1901 1888 1875 1864 1835 1821	1940 1927 1913 1900 1887 1860 1847 1833 1820	1939 1925 1912 1899 1885 1872 1859 1845 1832 1819	1938 1924 1917 1884 1871 1857 1854 1831
610.0 611.0 612.0 613.0 614.0 614.0 616.0 617.0 618.0 619.0	1816 1803 1776 1776 1763 1750 1737 1724 1711	1815 1802 1788 1775 1762 1749 1736 1722 1709 1696	1814 1800 1787 1774 1761 1747 1734 1721 1708 1695	1812 1799 1786 1772 1759 1746 1733 1720 1707	1811 1798 1784 1771 1758 1745 1745 1732 1719 1705	1.810 1.796 1.783 1.770 1.757 1.743 1.730 1.717 1.704 1.691	1808 1795 1782 1769 1755 1742 1729 1716 1703 1690	1 807 1 794 1 780 1 767 1 754 1 741 1 728 1 715 1 701 1 688	1806 1792 1779 1766 1753 1740 1726 1713 1700 1687	1804 1791 1778 1765 1751 1738 1725 1712 1699 1686

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P, mm Hg	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
620.0 622.0 623.0 623.0 623.0 625.0 625.0 626.0 628.0	1684 1671 1653 1645 1632 1619 1606 1593 1580 1567	1663 1670 1657 1644 1631 1618 1605 1579 1566	1682 1689 1686 1643 1643 1617 1604 1591 1578 1565	1680 1667 1654 1641 1628 1615 1602 1589 1576 1563	1679 1665 1653 1640 1627 1614 1601 1508 1575 1562	1678 1669 1652 1639 1626 1413 1600 1587 1574	1677 1664 1657 1637 1624 1611 1598 1585 1572	1675 1662 1649 16436 1623 1610 1597 1584 1571	1674 1661 1648 1635 1622 1609 1583 1570 1587	1673- 1660 1647- 1634- 1620- 1608- 1582- 1582- 1589- 1586-
631.0 631.0 633.0 634.0 635.0 635.0 636.0 637.0	1541 1529 1516 1503 1490 1477 1464 1452	1540 1540 1527 1514 1502 1489 1473 1450 1438	1539 1536 1513 1500 1407 1475 1462 1449	1536 1536 1512 1512 1499 1486 1461 1448	1549 1536 1523 1511 1498 1485 1472 1472 1459 1446 1434	1535 1535 1532 1509 1496 1487 1458 1451	15321 15321 1595 1495 14457 14457 14441	1545 1530 1530 1507 1494 1468 1455 1455 1430	1544 1538 1505 1493 14867 1486 1454 1429	1530 1537 1504 1491 1475 1465 1465 1467
640.0 641.0 642.0 643.0 645.0 645.0 646.0 648.0	1426 1413 1401 1388 1375 1362 1350 1337	1425 1412 1399 1387 1374 1361 1349 1336 1323	1423 1411 1398 1385 1360 1347 1347 1335 1322	1422 1409 1397 1364 1371 1359 1346 1333 1321 1308	1421 1408 1395 1383 1370 1357 1345 1345 1319	1420 1407 1394 1381 1369 1356 1343 1343 1343 1343	1418- 1406 1393 1360 1365 1355 1342 1330 1317 1304	1417 1404 1392 1379 1366 1354 1328 1316 1303	1416 1403 1378 1365 1355 1357 1327 1314 1302	1415 1402 1389 1376 1364 1351 1338 1326 1313 1301
650.0 652.0 653.0 653.0 655.0 655.0 657.0 658.0	1200 22. 1287 1274 1262 1249 1236 1224 1211 1199	1298 1235 1273 1260 1248 1235 1223 1210 1198 1185	1297 1284 1279 1259 1247 1234 1221 1209 1197	1296 1283 1270 1258 1245 1233 1220 1208 1195 1163	1294 1262 1269 1257 1244 1231 1219 1206 1194 1162	1293 1260 1265 1265 1243 1230 1218 1205 1193 1180	1292 1276 1276 1234 1249 1216 1206 11092	1290 1278 1263 1240 1228 1215 1215 1217 1190	1289 1277 1264 1239 1236 1216 12102 1189 11.77	1288 1275 1265 1238 1238 1213 1210 1.188 1-175
660.0 661.0 662.0 663.0 664.0 665.0 667.0 666.0 669.0	1174 1162 1.149 1.137 1124 1112 1100 1087 1075 1063	1173 1160 1148 1136 1123 1111 1098 1086 1074 1662	1172 1159 1147 1134 1122 1110 1097 1085 1073 1060	1170 1158 1143 1133 1121 1108 1096 1084 1071 1059	1169 1157 1144 1132 1120 1107 1095 1082 1070	1168 1155 1143 1131 1:16 1:06 1094 1069 1069	1167 1154 1142 1129 1117 1105 1092 1068 1055	1165 1153 1141 1128 1116 1103 1091 1079 1066 1054	1164 1152 1139 1127 1115 1102 1090 1078 1065 1053	1163 1150 1138 1126 1113 1101 1089 1076 1064 1052
670.0 671.0 672.0 673.0 673.0 675.0 676.0 677.0 678.0	1:050: 1:038 1:028 1:014 1:001 989 977 965 953 940	1049 1037 1025 1012 1000 988 976 964 951 939	1048 1036 1023 1011 999 987 975 .962 950 938	1047 1034 1022 1010 998 986 973 961 949 937	1046 1033 1021 1009 997 984 972 960 948 936	1044 1032 1020 1020 1008 995 983 971 959 947 934	1043 1031 1019 1006 994 982 970 957 945 933	1042 1030 1017 1005 993 981 968 956 944 932	1041 1028 1016 1004 992 979 967 955 943 931	1039 1027 1015 1003 990 978 966 954 942 929
680.0 681.0 682.0 683.0 685.0 685.0 687.0 687.0	928 916 892 880 868 856 844 832 820	927 915 903 891 879 867 854 842 830	926 914 9089 877 8653 841 827	925 912 900 888 876 864 852 840 828	923 911 899 887 875 863 851 839 827 815	922 910 898 886 874 862 850 838 826 814	921 909 897 885 873 860 848 836 824 812	920 908 896 883 871 859 847 823 811	919 906 894 882 870 856 846 834 822 810	917 905 893 886 869 857 8435 821 809
690.0 691.0 692.0 693.0 695.0 695.0 696.0 697.0 698.0	808 796 794 772 760 748 736 724 712 700	806 794 782 770 758 747 735 711 699	805 793 781 769 757 745 745 722 710 698	804 792 780 768 744 732 720 708 697	803 791 779 767 755 743 731 719 707 695	802 790 778 766 754 742 730 718 706	800 788 7764 764 752 741 727 717 705 693	799 787 775 763 751 739 727 716 704	798 786 774 762 750 738 726 714 702 691	797 785 7761 761 749 737 725 713 701 689
700.0 701.0 702.0 703.0 704.0 705.0 706.0 707.0 707.0	688 676 665 653 641 629 617 606 594 582	687 675 663 652 640 628 616 693 581	686 674 662 650 639 627 615 603 591	685 673 661 649 637 626 614 602 590 579	683 672 660 648 636 624 613 601 589 577	682 670 659 647 635 623 611 500 588 576	681 669 657 646 622 610 598 587 575	680 656 636 644 621 621 597 586 574	679 667 655 643 620 608 596 584 573	678 666 654 630 618 607 595 583 571
710.0 711.0 712.0 713.0 714.0 714.0 716.0 717.0 718.0	570 559 547 535 523 512 	569 557 546 534 522 5499 487 476 464	568 556 543 521 509 498 486 475 463	567 555 543 532 530 508 497 485 473 462	566 554 542 531 519 507 496 484 472 461	564 553 541 529 518 506 494 483 471 459	5520 5520 5520 5526 5526 5593 4870 458	552 5539 527 515 504 490 469 457	561 549 536 526 514 503 491 478 468 456	560 548 536 525 513 501 490 478 466 455

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TABLE VIII - Continued

GEOPOTENTIAL ALTITUDE IN METERS as a function of PRESSURE IN MILLIMETERS OF MERCURY

		_								1
P, mm Hg	0.0	ÖΊ	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0,9
720.0 781.0 782.0 783.0 785.0 725.0 726.0 727.0 729.0	454 442 431 419 407 396 384 373 361 350	453. 441 429 418 406 395 383 372 360 349	451 440 426 417 405 394 362 371 359 346	450- 439 427 419- 419- 392 381 369 356 346	449 437 426 414 403 391 368 357 345	448 436 425 413 402 390 379 367 356 344	4457 4254 412 400 389 377 366 354 343	446 434 422 411 399 388 376 353 342	444 433 421 410 398 387 375 352 341	443 432 420 409 397 386 374 351 340
730.0 731.0 732.0 733.0 735.0 736.0 737.0 738.0 739.0	3727 3727 3727 373 283 2870 2547 236	337 326 314 303 291 280 269 257 246 235	336 325 3313 3302 2979 268 268 255 233	335 312 310 2878 278 265 244 255	324 321 321 329 265 265 254 243 231	333 321 310 298 287 276 264 253 241 230	3320 309 297 286 274 252 240 240 229	330 3197 3296 2253 2250 239 228	329 318 306 295 283 272 269 249 238 227	326 315 294 282 271 260 246 237 225
740.0 742.0 742.0 743.0 745.0 745.0 746.0 747.0 748.0 749.0	224 202 190 179 168 157 145 134 123	222 201 101 107 107 105 143 122	222 21-1 199 100 177 166 154 163 132 132	221 210 198 187 176 164 153 142 131	220 208 197 186 175 163 152 141 130	219 207 1965 185 162 151 140 128 117	218 206 195 172 161 150 127 116	216 205 192 171 160 149 137 126 115	215 204 193 181 170 159 148 136 125	214 203 192 186 169 156 146 135 124
750.0 751.0 752.0 753.0 753.0 755.0 757.0 757.0 757.0	112 100 89 78 67 56 44 33 22	110 99 88 77 65 55 432 21	1'09 98 87 76 65 53 42 31 20	108 97 86 75 63: 52 41 30 19	107 965 974 621 40 29 18	106 84 72 61 50 39 28 17	105 94 82 71 60 49 38 27	104 93 81 70 59 48 37 26 14	103 91 69 58 47 34 13	101 90 79 68 57 46 34 23
760.0 761.0 762.0 763.0 765.0 765.0 767.0 766.0 769.0	-0 -11 -22 -33 -44 -55 -66 -77 -88	-12 -23 -34 -45 -45 -67 -79 -90 -101	- 12 - 13 - 23 - 47 - 47 - 56 - 160 - 102	-3 -14 -25 -37 -48 -59 -70 -81 -92	-4 -16 -27 -38 -49 -60 -71 -82 -93 -104	-6 -17 -28 -39 -50 -61 -72 -83 -94 -105	-7 -18 -29 -41 -62 -73 -85 -106	-8 -19 -30 -41 -52 -63 -74 -85 -96	-9 -20 -31 -53 -54 -75 -86 -97 -108	-10 -21 -32 -43 -54 -65 -76 -87 -98
770.0 771.0 772.0 773.0 774.0 775.0 776.0 777.0	-110 -121 -132 -143 -154 -165 -176 -187 -198 -209	-111 -122 -133 -144 -155 -166 -177 -188 -199 -210	-113 -124 -135 -145 -156 -167 -178 -189 -200 -211	114 1125 1136 1147 1168 1179 1201 1212	-115 -126 -137 -148 -159 -170 -180 -191 -202 -213	-116 -127 -138 -149 -160 -171 -182 -192 -203 -214	-117 -128 -139 -151 -178 -183 -194 -215	-1:18 -1:29 -1:40 -1:51 -1:62 -1:73 -1:84 -1:95 -2:05 -2:16	-119 -130 -141 -152 -163 -174 -185 -196 -207 -217	-120 -131 -145 -153 -164 -175 -186 -187 -208 -219
780.0 781.0 782.0 783.0 784.0 785.0 786.0 786.0 789.0	-220 -230 -241 -252 -263 -274 -285 -295 -317	-221 -232 -242 -253 -256 -276 -286 -297 -318	-222 -233 -244 -255 -276 -287 -298 -319	-223 -234 -245 -255 -256 -277 -288 -299 -209 -320	-224 -235 -246 -257 -267 -278 -289 -300 -311 -321	-225 -236 -247 -258 -268 -279 -290 -312 -322	-226 -237 -2459 -270 -280 -291 -302 -313 -323	-227 -238 -249 -260 -271 -281 -292 -303 -314 -325	-226 -239 -250 -261 -272 -282 -293 -304 -315 -326	229 -240 -251 -242 -273 -284 -294 -305 -316 -327
791.0 791.0 793.0 793.0 795.0 795.0 796.0 797.0 798.0	-325 -339 -349 -360 -371 -381 -392 -403 -413 -424	-529 -340 -350 -361 -372 -382 -393 -404 -415 -425	-330 -341 -351 -362 -373 -384 -394 -405 -416 -426	-331 -342 -352 -363 -374 -385 -395 -406 -417 -427	-332 -343 -354 -364 -375 -386 -396 -407 -418 -428	-333 -344 -355 -365 -367 -387 -397 -408 -419 -429	-334 -345 -356 -366 -377 -388 -398 -409 -420 -430	-335 -346 -357 -367 -378 -389 -400 -410 -421 -432	-336 -347 -358 -369 -379 -390 -401 -411 -422 -433	-337 -348 -359 -370 -380 -391 -402 -412 -423
800.0 802.0 803.0 803.0 805.0 805.0 806.0 806.0	-435 -436 -4567 -4677 -498 -509 -520	-436 -446 -457 -468 -478 -489 -489 -510 -521 -531	-437 -448 -458 -469 -470 -501 -512 -532	-436 -449 -459 -470 -480 -491 -502 -512 -523	-439 -450 -460 -471 -461 -503 -513 -514 -534	-440 -451 -461 -472 -483 -594 -514 -525 -535	-441 -452 -462 -473 -494 -505 -515 -526 -536	-442 -453 -463 -463 -485 -495 -506 -516 -527 -538		-444 -455 -466 -476 -487 -497 -519 -519
810.0 811.0 812.0 813.0 813.0 815.0 816.0 816.0 816.0	-541 -551 -562 -562 -583 -594 -614 -615 -635	-542 -552 -563 -573 -564 -594 -605 -615 -626 -636	-543 -553 -564 -574 -585 -595 -606 -616 -627 -637	-544 -554 -565 -575 -586 -596 -607 -617 -628	-545 -555 -566 -576 -587 -597 -608 -629 -639	-546 -556 -578 -578 -588 -598 -609 -619 -630 -640	-547 -558 -568 -579 -589 -600 -610 -620 -631	-548 -559 -569 -580 -590 -611 -622 -632	-549 -560 -570 -581 -591 -602 -612 -623 -633 -643	-550 -561 -571 -582 -592 -603 -613 -624 -634

										5
P, mm Hg	0.0	0,1	0.2	0.3	0.4	0.5	Ó.6	Ò.7	0.8	0.9
820.0 921.0 922.0 824.0 825.0 825.0 826.0 828.0	-646 -656 -666 -677 -687 -698 -708 -718 -718 -729 -739	-647 -657 -667 -678 -688 -699 -709 -719 -730 -740	-648 -658 -668 -679 -689 -700 -710 -720 -731	-649 -659 -670 -680 -690 -701 -711 -721 -732 -742	-650 -660 -671 -681 -691 -702 -712 -723 -733 -743	-651 -661 -672 -682 -692 -703 -713 -724 -734	-652 -662 -673 -683 -593 -704 -714 -725 -735 -745	-653 -663 -674 -684 -694 -705 -715 -726 -736	-654 -664 -675 -685 -696 -706 -716 -727 -737	-655 -665 -676 -686 -697 -707 -717 -717 -728 -738 -748
830.0 831.0 832.0 833.0 834.0 835.0 836.0 837.0 838.0	-749 -760 -770 -780 -791 -801 -811 -821 -832 -842	-750 -761 -771 -781 -792 -802 -812 -823 -833 -843	-751 -762 -772 -782 -782 -793 -803 -813 -824 -834 -844	-753 -763 -773 -783 -794 -804 -814 -825 -835 -845	-826. -836 -846	-755 -765 -775 -786 -796 -306 -8!6 -8!6 -827 -837	~756 -766 -776 -787 -797 -807 -817 -828 -838 -848	-757 -767 -777 -788 -798 -808 -818 -829 -839 -849	-758 -768 -778 -789 -799 -809 -819 -830 -840 -850	-759 -769 -779 -790 -800 -810 -820 -831 -841
840 • 0 - 841 • 0 842 • 0 844 • 0 845 • 0 846 • 0 847 • 0 847 • 0 848 • 0	-852 -862 -863 -863 -993 -903 -913 -924 -944	-853 -863 -874 -894 -904 -914 -925 -935 -945	-854 -865 -875 -875 -905 -916 -936 -946	-855 -866 -876 -886 -986 -906 -917 -917 -937	-856 -8677 -8777 -8977 -997 -918 -928 -938	-857 -868 -878 -878 -898 -908 -908 -919 -929 -939	-858 -869 -869 -889 -899 -909 -909 -930 -940 -950	-859 -870 -880 -890 -910 -910 -921 -931 -941	-860 -871 -881 -891 -911 -922 -932 -942	-861 -872 -882 -892 -902 -913 -923 -923 -923 -953
851.0 851.0 853.0 853.0 856.0 856.0 857.0 857.0	-954 -964 -974 -985 -1005 -1015 -1025 -1045	-955 -965 -975 -985 -996 -1016 -1026 -1036 -1046	-956 -966 -976 -986 -987 -1007 -1017 -1027 -1037 -1047	-957 -967 -977 -987 -998 -1008 -1018 -1028 -1038 -1048	-958 -968 -978 -989 -1999 -1019 -1029 -1039 -1049	-959 -969 -979 -990 -1000 -1010 -1020 -1030 -1040 -1050	-960: -970 -981 -1001 -1011 -1021 -1031 -1041 -1051	-961 -971 -981 -992 -1002 -1012 -1022 -1032 -1042 -1052	-962 -972 -982 -993 -1013 -1023 -1023 -1043 -1043	-963 -973 -983 -984 -1004 -1014 -1024 -1034 -1054
860.0 861.0 863.0 864.0 865.0 865.0 865.0 867.0	-1055 -1065 -1075 -1085 -1085 -1095 -1105 -1115 -1125 -1135 -1145	-1056 -1066 -1076 -1086 -1096 -1106 -1116 -1126 -1136 -1146	-1057 -1067 -1077 -1087 -1097 -1107 -1117 -1127 -1137 -1137	-1058 -1068 -1078 -1088 -1098 -1108 -1118 -1128 -1138	-1059 -1069 -1079 -1089 -1199 -1119 -1129 -1139 -1139	-1060 -1070 -1080 -1090 -1190 -1110 -1120 -1140 -1140	-1061 -1071 -1081 -1091 -1101 -1111 -1121 -1131 -1141 -1151	-1062 -1072 -1082 -1092 -1112 -1112 -1132 -1142 -1152	-1063 -1073 -1083 -1093 -1103 -1113 -1123 -1133 -1143 -1153	-1064 -1074 -1084 -1094 -1104 -1114 -1124 -1134 -1134 -1154
870.0 871.0 872.0 873.0 874.0 875.0 876.0 877.0 878.0	-1155 -1165 -1175 -1185 -1195 -1205 -1214 -1224 -1234	-1156 -1166 -1176 -1186 -1186 -1206 -1215 -1225 -1235 -1245	-1157 -1167 -1177 -1197 -1197 -1207 -1216 -1226 -1236 -1246	-1158 -1168 -1178 -1188 -1198 -1208 -1217 -1227 -1237 -1247	-1159 -1169 -1179 -1189 -1199 -1209 -1218 -1228 -1238 -1248	-1160 -1170 -1180 -1190 -1200 -1209 -1219 -1229 -1239 -1249	-1161 -1171 -1181 -1201 -1201 -1210 -1220 -1220 -1240 -1250	71162 -1172 -1182 -1192 -1202 -1211 -1221 -1231 -1241 -1251	-1163 -1173 -1183 -1203 -1203 -1222 -1222 -1232 -1232 -1232	-1164 -1174 -184 -1204 -1213 -1223 -1233 -1243 -1253
880.0 881.0 882.0 883.0 884.0 885.0 887.0 888.0	-1254 -1264 -1274 -1283 -1283 -1393 -1313 -1323 -1323 -1332 -1342	-1255 -1265 -1275 -1274 -1294 -1304 -1314 -1323 -1333	-1256 -1266 -1276 -1276 -1295 -1305 -1315 -1325 -1334 -1344	-1257 -1267 -1277 -1276 -1296 -1306 -1316 -1326 -1335 -1345	-1258 -1268 -1275 -1287 -1297 -1307 -1317 -1326 -1346	-1259 -1269 -1279 -1288 -1298 -1318 -1326 -1337 -1347	-1260 -1270 -1280 -1289 -1299 -1319 -1329 -1338 -1348	-1261 -1271 -1281 -1290 -1300 -1310 -1320 -1339 -1349	-1262 -1272 -1281 -1291 -1301 -1311 -1321 -1331 -1340 -1350	-1263 -1273 -1282 -1292 -1302 -1312 -1322 -1332 -1341 -1351
890.0 891.0 892.0 893.0 895.0 895.0 896.0 898.0	-1352 -1362 -1372 -1381 -1391 -1410 -1420 -1420 -1440	-1353 -1363 -1373 -1382 -1392 -1492 -1411 -1421 -1431 -1441	-1354 -1364 -1374 -1383 -1393 -1403 -1412 -1422 -1422 -1432	-1355 -1365 -1374 -1384 -1394 -1404 -1413 -1423 -1423 -1442	-1356 -1366 -1375 -1385 -1385 -1495 -1414 -1424 -1434	-1357 -1367 -1376 -1386 -1396 -1415 -1425 -1425 -1444	-1358 -1368 -1377 -1387 -1397 -1407 -1416 -1426 -1436 -1445	-1359 -1369 -1378 -1388 -1398 -1408 -1417 -1427 -1437 -1446	-1360 -1379 -1379 -1389 -1389 -1499 -1418 -1428 -1447	-1361 -1371 -1380 -1390 -1400 -1419 -1419 -1429 -1439 -1448

	(F		e e							
P, mm Hg	∭ o	J	2_	3	4	5	6	7	8	9
900.	-1449	-1459	-1469 -1565	-1478 -1574	-1488 -1584	-1498 -1593	-1507: -1603	-1517 -1513	-1526 -1622	-1536 -1632
910. 920.	-1546 -1641	-1555 -1651	-1660	-1670	-1679	-1689	-1698	-1707	-1717	-1726
930	-1736	-1745	~1755	-1764	-1773	- i 783 - i 876	-1792 -1886	-1802 -1895	-1811 -1904	-1820 -1913
940. 950.	-1830 -1923	-1839 -1932	-1848 -1941	-1858 -1950	-1867 -1960	-1969	-1978	-1987	-1996	-2006
960.	-2015	-2024	-2033	-2042	-2052	-2061	-2070	~2079	-2088	-2097
970. 980.	-2106 -2197	-21.15 -2206	-2125 -2215	-2134 -2224	-2143 -2233	-2152 -2242	-2161 -2251	-2170 -2260	-2179 -2269	-2188 -2278
990.	-2267	-2296	-2305	-2314	-2323	-2332	-2341	-2350	-2358	-2367
1000	-2376	~2385 -2474	-2394 -2482	+2403 -2491	-2412 -2500	-2-2421	-2429. -2518	-2438. -2526	-2447 2535	-2456 -2544
1020	-2465 -2553	-2561	-2570	-2579	-2587	-2596	-2605	-2614	-2622	~2631
111030.	-2640	. 2648	-2657	-2666	-2674	-2683	-2692	-2700 -2786	-2709 -2795	-2717 -2803
1040.	-2726 -2812	-2735 -2820	- 2743 - 2829	-2752 -2837	-2760 -2846	-2769 -2854	-2778 -2863	-2/00 -2871	-2880	-2888
1060	-2897	-2905	2914	~2922	-2931	-2939	-2948	-2956	-2965	-2973
1070.	-2981	-2990	-2998	-3007 -3090	-3015 -3099	-3023 -3107	-3032 -3115	-3040 -3123	-3048 -3132	-3057 -3140
1090.	-3065 -3148	-3074 -3157	-3082 -3165	-3173	-3181	-3196	-3198	-3206	-3214	-3223
* 0041 *	-3231	-3239	-3247	~3256	-3264	-3272	-3280	-3288	-3297	-3305
1-1-1-0-4	-33#3	-3321	3329	-3337	-3346	-3354	-3 36 2	-3370	-3378	-3386 -3467
1120	-3394 -3475	-3402. -3483	-3410 -3491	-3419 -3499	-3427 -3507	-3435 -3515	-3443 -3523	-3451 -3531	-3459 -3539	-3547
1-1.40	-3555	-3563	-3571	-3579	-3587	~3595	-3603	-3611.	-3619	-3627
1150.	-3635	-3643	-3651 -3730	-3659	-3667	-3675	-3682	-3690	-3698 -3777	-3706 -3785
1170	-3714 -3793	-3722 -3800	-3730 -3808	-3738 -3816	=3745 -3824	-3753 -3832	-3761 -3839	=3.769 =3847	-3855	=3863
1:1:80	-3871	-3878	-3886	-3894	-3902	-3909	-3917	-3925	-3933	-3940
1-1-90	3948	-3956	-3963	-3971	-3979	-3986	-3994	500 4	-401.0	-4017
1200.	-4025	-4033	-4040	-4048 -4124	-4056 -4132	-4063 -4139	-4071 -4147	-4078 -4154	-4086 -4162	-4094 -4170
1220.	-4101 -4177	-4109 -4185	-41:17 -41:92	-4200	-4207	-4215	-4223	-4230	-4238	-4245
1230.	-4253	-4260	-4268	-4275	-4283	-4290	-4298	-4305	-4313	-4320
1240.	-4328	-4335	-4342	-4350	-4357	~4365 -4439	-4372 -4446	-4380 -4454	-4387 -4461	-4395 -4468
1250.	-4402 -4476	-4409 -4483	-4417 -4491	-4424 -4498	-4432 -4505	-4439 -4513	-4520	-4527	-4535	-4542
1270	-4549	-4557	=4564	-4571	-4579	-4586	-4593	-4600	-4608	-4615
1280.	-4622	-4630	-4637	-4644	-4651	-4659 -4731	-4666 -4738	-4673 -4745	-4680 -4753	-4688 -4760
1290.	-4695	-4702	-4709	-471:7	-4724	-4/31	-4/30			
1300.	-4767	-4774	-4781	-4788	-4796	- <u></u> 4803	-4810	-4817 -4888	-4824 -4896	~4831 ~4903
1310.	-4839 -4810	-4846 -4917	-4853 -4924	-4860 -4931	-4867 -4938	-4874 -4945	-4881 -4952	-4868 -4959	-4966	-4973
1320.	-4910	91/	-4924	-4321	730	-4945	7736	7,3,	. 700	

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Table IX.
GEOPOTENTIAL ALTITUDE IN FEET AS A FUNCTION OF PRESSURE IN MILLIBARS.

TABLE IX

GEOPOTENTIAL ALTITUDE IN FEET as a function of PRESSURE IN MILLIBARS

P, mb	0.00	0. ∮4	0.02	0.03	0:04	0.05	0.06	0.07	0.08	0.09
8.60 8.70 8.80 8.90	104937 104656 104436	104911 104661 104413	104886 104636 104389	1 04861 1 04611 1 04364	104 8 36 104 5 86 104 3 39	104811 104561 104315	104786 104537 104290	104761 104512 104266	104987 104736 104487 104241	104962 10471 104462 104217
9.10 9.20 9.20 9.40 9.50 9.50 9.50	104193 103950 103711 103474 103839 103806 102775 102552 102327 102105	104168 103926 103626 103630 103216 102935 102756 102529 102303	104144 103902 103663 103427 103127 102962 102733 102506 102282 102061	104120 103678 103639 103403 103170 102939 102710 102484 102850 102039	104095 103854 103656 103565 103146 102961 102461 102236 102236	104071 103830 103830 10386 103183 102833 102833 102439 102816 101995	104047 103806 103836 103833 103100 102842 102842 102817 102194	104023 103782 103785 103309 1033077 102647 102647 102594 102171 101951	103999 103758 103586 103054 102054 102057 102372 102372 102149	103974 103735 103497 103263 103031 102501 102579 102349 102127

						•	1 1			
P, mb	0.00	0.01	0.02	0.03	0.04	0,05	-0,06	0.07	Ö.08	0.09
10.00 10.10 10.20 10.20 10.40 10.50 10.60 10.60 10.60	101885 101668 101452 101239 101028 100619 100612 100407 100204 100003	101863 101646 101431 101218 101007 100798 100387 100387 100184 99983	101841 101624 101409 101197 100986 100777 100366 100164 99963	101820 101603 101388 101176 100965 100757 100550 100346 100144 99943	101798 101581 101367 101154 100944 100736 100530 100326 100123 99923	101776 101560 101345 101133 100923 100715 100509 100305 100103 99903	101112 100902 100695 100489 100285 100083	101091 100652 100674 100468 100265 100063: 99863	101711 101495 101282 101070 100653 100448 100245 10043	101689 101474 10160 151049 100540 100633 100423 100224 100023 99824
11-00 11-20 11-20 11-30 11-40 11-50 11-70 11-80	99804 99607 99411 99217 99025 98835 98647 98460 98275 98091	99784 99387 99392 99198 99006 98816 98628 98628 98625 98673	99764 99367 99372 99179 98987 98797 98409 98423 98238 98054	99745 99548 99353 99160 98968 98778 98390 98304 98219 98036	99725 99528 99333 99140 98949 98760 98572 985785 98201 98018	99705 99509 99314 99121 98930 98741 985367 98367 98183	99385 99489 99295 99102 98911 98722 98534 98346 ~78164 97982	99666 99470 99475 99083 98892 98703 98516 98530 98146 97963	99646 99456 99256 99064 98873 98684 98497 98311 98128 97945	99626 99431 99237 99045 98654 98655 98478 98109 97927
12.00 12.10 12.20 12.30 12.40 12.50 12.50 12.50	97909 97728 97549 97549 97196 97022 96848 96677 96506 96338	97891 97710 97332 97354 97179 97004 96831 96680 96489 96321	97873 97692 97514 97514 97161 96987 96814 96843 96473 96304	97853. 97675 97476 97319 97144 96969 96797 96625 96456 96287	97837 97637 976478 97301 97126 96952 96780 96608 96439 96439	97818 97639 97461 97284 97109 96935 96762 96591 96422 96254	97800 97621 97443 97266 97091 96917 96745 96574 96405 96237	97782 97603 97625 97249 97074 96900 96728 96557 96388 96220	97764 97565 97407 97231 97056 96383 96711 96340 96371 96203	97746 97567 97390 97214 97039 96866 96694 96523 96384 96187
13.00 13.10 13.20 13.30 13.40 13.50 13.60 13.70	96170 96004 95839 95675 95351 95351 95191 95033 94875	96153 95967 95852 95659 95496 95335 95176 95017 9489 94703	96137 95971 95806 95842 95480 95319 95160 95001 94844 94688	96120 95754 95769 95464 95464 95303 95144 94628 94672	96103 95936 95973 95610 95448 95487 95128 94970 94971 94657	96087 95921 95927 95894 95432 95432 95112 94954 94754 94764	96070 95905 9577 95577 95416 95255 95096 94938 94938	96053 95888 95724 95761 95400 95239 95080 94922 94766 94610	96037 95272 95272 95345 95384 95384 95264 94907 54750 94594	96020 95825 95829 95367 95367 95809 94891 94734 94579
14.00 14.10 14.20 14.30 14.50 14.50 14.60 14.70 14.90	94584 94409 94256 94105 93954 93604 93655 93508 93361 93216	94548 94394 94241 94269 93939 93739 93641 93493 93493 93201	94533 94379 94226 94074 93924 93774 93626 93478 93332 93187	94517 94363 94211 94059 93909 93759 93411 93464 93317 93172	94502 94348 94196 94044 93894 93794 93396 93303 93158	94486 94333 94180 94189 93879 93879 93981 93434 93888 93143	94471 94317 94165 94165 93864 93715 93567 93420 93274 93129	94456 94302 94150 93999 93849 93700 93552 93405 93259 93114	94440 94287 94138 93984 93834 93837 93590 93245 93100	94425 94272 94120 93969 93619 93670 93523 93376 93230
5.00 15.20 15.30 15.40 15.40 15.40 15.40	93071 92928 92785 92643 92503 92563 92264 92086 91949 91813	93057 92913 92713 92629 92489 92349 92210 92072 91935 91799	93042 92899 92757 92615 92475 9235 92196 92059 91922 91786	93028 92665 92742 92661 92461 92321 92183 92183 921908 91772	93014 92870 92728 92587 92447 92307 92169 92031 91895 91759	92099 92856 92714 9273 92433 92433 92293 92155 92018 91881 91745	92985 92842 92755 92559 92419 92279 92141 92004 91867 91732	92970 92828 92686 92685 92405 92127 91 990 91 854 91 718	92956 92613 92672 92531 92391 92352 92114 91976 91840 91705	92992 92799 92667 92617 92377 92377 9230 92100 91963 91827 91861
16.00 16.20 16.20 16.30 16.30 16.50 16.50	91478 91543 91410 91277 91145 91014 90884 90755 90626	91664 915307 91397 91264 91132 910071 90742 90613 90486	91651 91517 91363 91251 91119 90968 90858 90729 90601 90473	91637 91503 91370 91370 91106 90975 90845 90716 90860	91624 91490 91357 91224 910932 90962 90832 90703 90575	91417 91477 91343 91211 91080 90949 90819 90890 90862 90435	91597 91463 9133 91198 91067 90936 90806 90878 90549 90422	91 984 91 450 91 317 91 185 91 054 90 983 90 794 90 665 90 537 90 409	91870 91437 91304 91172 91041 90910 90781 90682 90524 90397	91567 91423 914290 91159 91027 90697 90768 90639 90511 90384
17.00 17.10 17.20 17.30 17.50 17.50 17.60 17.70	90371 90245 90120 80955 89747 89747 89825 89803 89382 89382	90359 90232 90107 85982 89858 89735 89413 89491 89370 89249	90346 90820 90098 89970 89946 89723 89600 89479 89358 89237	90333 90207 90082 89958 89634 89711 89586 89467 89346 89225	90321 90195 90070 9945 89821 59698 69576 69456 89334 89213	90308 90182 90057 89933 89806 89864 89442 89322 89202	90295 90170 90045 89920 89797 89674 89532 89430 89310	90 283 90 157 90 032 89908 89784 89662 89540 89418 89298 89178	90270 90145 90020 89896 89772 89649 89527 89527 89286 89166	90258 90132 90007 89883 89760 89617 89515 89394 89273
18.00 18.20 18.30 18.40 18.60 18.60 13.70 18.90	89142 89023 88904 98767 98669 98553 88437 88228 88208	87:30 84012 88872 88775 88658 88541 98426 98311 88176	89118 88999 88863 88763 88646 88530 88414 88199 88185	89106 88967 88869 38751 33634 88518 88403 88288 88173	59094 85975 88857 88540 88523 88507 88391 88276 88162 88048	89082 8845 88728 88475 88495 88265 88265 88151	89070 88952 888716 88716 88600 88484 88253 88253 88253	87058 88940 88422 88705 88472 88472 88472 88128	#9046 ##926 ##810 ##873 ##876 ##8460 ##8345 ##830 ##830	89005 36916 86776 86561 86565 86449 86304 86219 85105
19.20 19.20 19.40 19.40 19.40 19.40	87044 87756 87644 87754 8764 87314 87314 87696	87069 87887 87745 87633 87522 57303 87194 87085 86977	87958 87645 87733 87622 87622 87511 87401 87292 87183 87074	87947 87634 87722 8761 87500 87390 87291 87172 87164 84936	87935 87323 87711 87600 87489 87379 87270 87161 87(83	87924 87812 87700 87889 87478 87368 87259 87150 87042 86934	87613 87689 87689 87667 87357 87248 87139 87031	87902 877789 87678 87867 87366 87346 87237 87128 87020 86913	87890 87778 87667 87554 87375 87375 87318 87010 86902	87879 87767 877676 87545 87545 87434 87215 87215 87107 86999

TABLE IX - Continued

P, mb	0.0	. 0.1	0.2	0.3	0.4	0.5	0.6.	0.7	0.8	0.9
20.0 21.0 22.0 23.0 23.0 25.0 25.0 27.0 28.0 29.0	85836 84841 83892 82984 62113 81280 80478 79706	86774 85734 84744 83799 82896 62030 ≈ 81198 80399 79630 78889	86667 85633 84648 83707 82807 81117 80321 79555 78816	86562 85532 83615 82719 81036 80243 79480 78744	86456 85436 83524 82632 81777 80956 80166 79405 78671	86352 85332 84361 83433 82545 61675 808875 80088 79330 78600	86247 85233 84266 83342 82458 81610 80795 80011 79258	86144 85135: 84172: 83252 82372: 81527 80715 79935 79182 78456	86041 85036 84078 83163 82286 81444 80636 79858 79108 78385	85938 84938 83932 83932 83973 82260 81362 80587 79782 79035 78314
30.0 31.0 32.0 33.0 34.0 35.0 36.0 37.0 38.0	78244 77550 76878 76228 75598 74957 74393 73816 73255 72709	75173 77481 76912 76164 75536 74927 74335 73759 73200 72655	78103 77413 76746 76101 75474 74867 74276 73703 73145 72602	78033- 77346- 76681 76037- 75413- 74807- 74218- 73646- 73090- 72548	77963 77278 77616 75974 75351 74747 74160 73590 73035 72495	77894 77211 76551 75911 75290 74688 74103 73534 72980 72441	77024 77144 76486 75848 75229 74628 74045 73478 72926 72388	77755 77077 76421 75785 75168 74569 73988 73422 72871 72335	77686 77011 76356 75722 75107 74510 73930 73366 72817 7283	77618 76944 76292 75460 75460 75452 73873 73311 72763 72230
40 = 0 41 = 0 42 = 0 43 = 0 44 = 0 45 = 0 47 = 0 48 = 0	72177 71659 71154 70660 70179 69708 69249 68359 68359	72125 71608 71104 70612 70131 69662 69203 68755 68316 67886	72073 71557 71054 70563 70564 69616 69158 68710 68272 67844	72020 71506 71506 71004 70515 70037 69549 69113 68666 68229 67801	71968 71455 70955 70966 69989 69523 69068 68622 68186 67759	71917 71405 70905 70418 69942 69942 6947 69023 68578 68143 67717	71865 71354 70856 70370 69895 69431 68978 68534 68100 67675	71813 71304 70807 70322 69848 69385 68933 38490 68057 67633	71762 71254 70758 70274 69802 69340 68436 68446 68014 67591	71710 71204 70709 70226 69755 69894 68844 68403 67971
50.0 51.0 52.0 53.0 54.0 54.0 56.0 57.0 58.0	67507 67094 66689 66293 65903 65522 65147 64776 64417 64061	67465 67053 66649 66253 65865 65864 65110 64742 64381 64026	67424 67012 66609 66214 65826 65446 65072 64705 64365 63990	67382 66972 66569 66175 65788 65035 64669 64309 64309	67341 66931 66530 66136 65750 65371 64999 64633 64274 63920	67299 66891 66490 66997 63712 65333 64962 64357 64238 63885	67258 66850 66450 66058 65673 65296 64925 64925 64961 64202 63850	67217 66510 66411 66019 65635 65635 64888 64524 64167 63815	67176 66770 66371 65981 65597 65221 64852 54453 64132 63781	67135 66729 66332 65942 65584 64815 64815 64836 64816 64816
57.0 61.0 62.0 63.0 64.0 65.0 66.0 67.0	63367 63367 63029 62696 62368 62046 62728 61415 61107 60803	63677 63333 62995 62663 62336 62014 61697 61384 61076	63642 63299 62962 62630 62303 61982 61665 61353 61046 60743	63607 63265 62929 62597 62271 61634 61322 61015 60713	63573. 63895 62895 62564 62239 61918. 61602 61291. 60985 60985	63539 63197 62862 62532 62206 61886 61571 61261 60955 60653	63504 63164 62829 62499 62174 61855 61540 61230 60924	63470 63130 62795 62466 62142 61823 61509 61199 60894 60893	63436 63096 62762 62434 62110 61791 61477 61168 60864 60563	63401 63063 62729 62401 62078 61760 61446 61138 60833 60534
70.00 72.00 72.00 74.00 75.00 77.00 78.00	60504 60209 59918 59931 59938 59948 59793 58521 58521 58521 58527	60474 60180 59889 59602 59320 59320 58766 58494 58226	60445 60150 59860 59874 59292 59013 58736 58467 58199 57935	60415 60121 59831 59546 59264 59264 58711 58440 58173 57909	60385 60092 59803 59517 59517 5958 58958 58684 58413 58146 57882	60356 60063 59774 59489 59208 58930 58656 58386 58120 57856	60326 60034 59745 59461 59180 58903 58629 58359 58093 57830	60297 60005 59717 59432 59152 58875 58602 58333 58067 57804	60268 59976 59688 59404 59124 58848 58575 58306 58040 57778	60238 59947 59659 59376 59096 58820 58279 58279 58014 57752
80.00 81.00 83.00 84.00 84.00 84.00 87.00	57726 57467 57212 56960 56711 56464 56221 55980 55743 55508	57700 57442 57157 56935 56486 56486 56197 55197 55719	57674 57416 57161 56910 56661 56415 56173 55933 55461	57648 57390 57136 5685 5636 56391 56149 55909 55672 55438	57622 57345 57111 56860 56612 56327 56124 55885 55885	57596 57339 57085 56835 56587 56342 56100 55361 55625 55391	57570 57314 57060 56810 56518 56318 56076 35837 55601 55368	57544 57288 57035 56785 56588 56294 56052 55814 55578	57519 57263 57010 56760 56769 56269 56028 55790 55554	57493 57237 56965 56735 56485 56004 55746 55298
90.0 91.0 93.0 94.0 95.0 97.0 97.0	55875 55045 54018 54073 54070 54150 54150 53717 53717 53717 53717	55252 55022 54795 54371 54348 54128 53911 53695 53695	55229 55000 54773 54326 54326 54126 54126 53889 53674 53250	55206 54977 54750, 54526 54304 54085 53847 53657 53657	55183 54984 54728 54564 54282 54083 53846 53631 53619 53205	55160 54931 54705 54481 54260 54041 53824 53610 53397	55137 54909 54683 54459 54238 54019 53803 53588 53376	55114 54886 54660 54437 54216 53997 53781 53567 53355 53146	55091 54863 54638 54415 54194 53976 53760 53546 53334	55068 54840 54840 54615 54393 54172 53954 53738 53525 53313
100.0 101.0 102.0 103.0 104.0 104.0 107.0 104.0	53083 52876 52671 52468 52267 52068 51671 51675 51482 51290	53062 52651 52651 52448 52247 52048 51656 51656 51656	53041 52835 52630 52426 52227 51636 51636 51443 51452	53021 52814 52810 52408 52207 52009 51812 51617 51424 51233	53000 52794 52590 52387 52187 51989 51792 51598 51414	52979 52773 52569 52367 52167 511969 51773 51578 51386 51195	52959 52753 52549 52347 52147 52147 51753 51559 51367 51176	52938 52732 52529 52327 52127 51930 51734 51547 51347	52917 52712 52508 52307 52108 51910 51714 51528 51138	52897 52691 52488 52288 51890 51695 51309 51119
110.0 111.0 112.0 112.0 112.0 112.0 112.0 112.0	51100 50912 50725 50540 50357 50175 4995 49816 49639 49644	51081 50893 50707 50522 50339 50339 50137 49977 49977 49622 49446	51062 50674 50608 50503 50320 50320 49959 49781 49781 49427	51043 50856 50649 50405 50402 50121 49941 49763 49587	51025 50837 50651 50467 50103 49723 49745 49349	51006 50818 50832 50446 50266 50085 49728 49728	50800 50800 50614 50430 50248 50067 49888 49710 49534 49359	50968 50781 50596 50412 50230 50249 49870 49892 49516	50949 50762 50577 50393 50311 50031 49675 49479 49479	50930 50744 50559 50193 50193 50013 49834 49657 49481 49307

TABLE IX - Continued

P, mb	0.0	ŏ.ī	0.2	0.3	Ō. 4	0.5	06	0.7	0.8	0.9
120.0 121.0 122.0 123.0 124.0 125.0 126.0 126.0 126.0	49290 49117 48946 486776 48607 48440 48275 48110 47787	49272 49100 48929 48759 48551 48424 48258 48094 47769	49255 49083 48912 48742 48574 48407 48242 48077 47914 47753	49238 49065 48695 48695 486957 48390 48225 48061 47898 47737	49220 49048 48878 48708 48540 48540 48540 48209 48045 47882 47721	49203 49031 40861 98692 48524 48357 48192 47028 47866 47705	49186 49014 48844 488507 48341 49176 48012 47850 47688	49169 48997 48827 48658 48490 48324 48159 47996 47833 47672	49151 48980 48641 48474 48308 48143 47970 47817 47656	49134 48963 48793 48424 48457 48291 48126 47963 47801 47640
130.0 131.0 132.0 133.0 134.0 135.0 136.0 137.0 138.0	47624 47465 47307 47150 46994 46833 46382 46332	47608 47449 47291 47134 46978 46824 46670 46518 46317	A7592 47433 47275 47118 46963 46865 46503 46503 46503 46502	47576 47417 47259 47103 46947 46793 46640 46488 46337 46187	47560 47401 47444 47087 46932 46778 46624 46472 46322 46172	47544 47386 47072 47072 46916 46762 46609 46457 46307 46157	47529 47370 47212 47056 46901 46747 46594 46442 46292 36142	47513 47354 47197 47040 46885 46732 46427 46427 46427 46127	47497 47338 47181 47025 46870 46716 46564 46412 46262 46112	47481 47322 47165 47009 46855 46701 46397 46397 46097
140.0 141.0 142.0 143.0 143.0 145.0 146.0 147.0 148.0	46082 45934 45787 45441 45496 45362 45209 45067 44926 44786	46068 45920 45773 45427 45482 45338 45195 45053 64912 44772	46053 45905 45758 45612 45467 45324 45181 45039 44898 44758	46038 45890 45743 49598 45453 45309 45167 45025 44884 44744	46023 45875 45729 45583 45439 45295 45152 45011 44870 44730	46008 45861 45714 45714 45424 45281 45138 44997 44856 44716	45993 45846 45700 45654 45410 45266 45124 44983 44842 44703	45979 45831 45640 45395 45252 45110 44968 44689	45964 458170 458251 453251 453238 45096 44984 44614	45949 45802 45856 45811 45367 45224 45081 44940 44400
150.0 151.0 152.0 153.0 154.0 156.0 156.0	44547 44509 44371 44235 44099 43965 43831 23828 43546 43435	44633 44495 44395 44321 44086 43951 43818 43635 43523 43422	44619 44481 44344 44208 44072 43933 43804 63672 43540 435409	44605 44467 44330 44194 44059 43925 43791 63658 43526 43526	44592 44454 44317 44181 44045 43913 43778 43645 43513 43382	44578 44440 44503 44167 44032 43898 43764 43500 43369	44564 44426 44289 44154 44019 43884 43751 43619 43487 43356	44550 44413 44276 44140 44005 43871 43738 43605 43474 43343	44536 44399 44262 44126 43992 43858 43725 43592 43461 43330	44523 44385 44249 44113 43976 43844 43711 43579 43446 43317
160.0 161.0 162.0 163.0 164.0 165.0 166.0 167.0	43304 43175 43046 42918 42790 42664 42538 42413 42289 42166	43291 43162 43033 42905 42778 42651 42526 42401 42277 42153	43278 43149 43020 42692 42765 42639 42513 42386 42264 42141	43265 43136 43007 42879 42752 42626 42501 42376 42522 42129	43252 43123 4294 42867 42740 42614 42488 42364 42240 42116	43239 43110 42982 42854 42727 42601 42476 42351 42227 42104	43226 43097 42941 42841 42714 42586 42463 42339 42339 42215 42092	43213 43084 42956 42829 42702 42576 42451 42326 42203 42080	43200 43071 42943 42816 42563 42438 42314 42314 42190 42067	43188 43059 42930 42877 42951 42426 42301 42178 42055
1.70.0 1.71.0 1.72.0 1.73.0 1.74.0 1.76.0 1.76.0 1.76.0 1.78.0	42043 41921 41800 41679 41589 41321 41321 41086 40970	42031 41909 41787 41667 41547 41428 41309 41192 41074 40958	42018 41897 41775 41655 41656 41416 41296	42006 41884 41763 41643 41523 41404 41286 41168 41051 40935	41994 41872 41751 41631 41511 41391 41274 41156 41039 40923	41982 41860 41739 41619 41499 41380 41262 41145 41028 40912	41970 41848 41727 41607 41487 41369 41250 41133 41016 40900	41957 41836 41715 41595 41475 41357 41239 41121 41004 40888	41945 41824 41703 41583 41464 41345 41227 41110 40993 40877	41933 41812 41691 41571 41452 41333 41215 41098 40981 40865
	40854 40738 40624 40510 40396 40284 40171 40060 39949 39839	40842 40727 40612 40498 40385 40272 40160 40049 39938 39828	40831 40715 40501 40487 40374 40261 40149 40036 39927 399817	40819 40704 40989 40476 40426 40250 40138 40027 39916 39806	40807 40692 40578 40548 40351 40239 40127 40015 39995	40796 40681 40567 40453 40340 40227 - 40116 40004 39894 39784	40784 40670 40555 40442 40329 40216 40104 39993 39983 39773	40773 40658 40544 40430 40317 40205 40093 39982 39982 39762	40761 40647 40532 40419 40306 40194 40082 39971 39961 39751	40750 40635 40521 40408 40295 40183 40071 39850 39850
190.0 191.0 192.0 193.0 194.0 196.0 196.0	39729 39420 39511 39403 39295 39188 39082 38976 38976	39718: 39609 39500 39392 39285 39178 39071 38965 38863	39707 39596 39489 39381 39274 39161 38955 38650 38745	39496 39587 39478 39370 39263 39156 39050 38944 38839 38734	39685 39576 39468 39360 39252 39146 39039: 38934 38629 38724	39674 39565 39457 39349 39242 39135 39029 38923 38923 38714	39663 39554 39436 39236 39231 39124 39018 38913 38806 38703	39652 39543 39435 39327 39320 39114 39008 38902 38797 38693	39641 39533 39424 39317 39210 39103 35997 38892 38682	39430 39522 39414 39306 39199 3998 38988 38776 38672
200.0 201.0 202.0 203.0 204.0 204.0	38462 38585 38485 38485 38250 38148 38047 37946 37946	38651 38547 38444 38342 38239 38138 38036 37936 37836 37736	38641 38537 38434 38331 38229 38127 38026 37926 37926 37926	38430 38527 38424 38321 38219 38117 38016 37916 37916 37716	38620 38516 38413 3831:1 38209 36107 38006 37906 37806 37706	38610 38506 38403 38301 38199 38097 37996 37896 37796 37696	38599 38496 38393 38290 38188 38087 37986 37886 37786 37686	38589 38485 38383 38280 38178 38077 37976 37876 37776 37676	38578 38475 38375 38270 38168 38166 37966 37666 37666	38568 38465 38362 38158 38158 38057 37956 37856 37656
209.0 210.0 212.0 213.0 213.0 215.0 215.0 215.0	37746 37546 37549 37361 37281 37197 37060 36960 36773	37637 37838 37839 37342 37244 37147 37051 36955 36659 36764	37627 37528 37430 37332 37234 37137 37041 36945 36849 36754	37617 37518 37420 37322 37225 37128 37031 36935 36840 36745	37607 37508 37410 37318 37215 37118 37028 34926 36830 36735	37597 37498 37400 37303 37205 37109 37012 36916 36821 36726	37587 37488 37390 37293 37196 37099 37003 36907 36811 36716	37577 37479 37381 37283 37186 37089 36993 36897 36802 36707	37567 37469 3737! 37273 37176 37080 36983 36792 36897	37557 37459 37341 37264 371070 36974 36678 36688

TABLE IX - Continued

GEOPOTENTIAL ALTITUDE IN FEET as a function of PRESSURE IN MILLIBARS

			2	-		5.5				
P; mb	0.0	~· -0.1·	0.2	0.3	0.4	0.5	Õ.Ĝ	0.7	Q.8	0.9
220.0 221.0 223.0 224.0 225.0 227.0 227.0 228.0	36679 36584 36490 36397 36304 36211 36119 36027 35935 35844	36669 36575 36481 36387 36294 36202 36109 3618 35926 35935	36660 36565 36472 36378 36285 36100 36100 36917 35826	36650 36556 36462 36369 36183 36183 36991 35999 35908	36641 36547 36453 36359 36267 36174 36082 35899 35898	36631 36537 36443 36357 36165 36073 35981 35890 35799	36622 36528 364341 36341 36248 36156 36064 35972 35881 35789	36612 36718 36725 36332 36239 36146 36054 35963 35987 35780	36503 36509 36415 36322 36229 36137 36045 35954 35771	36594 36500 36406 36313 36128 36128 36034 3594 35943 35762
230.0 231.0 231.0 231.0 231.0 235.0 235.0 237.0 230.0	35753 35663 35572: 35482 35393 - 35303 35214 35126 - 35037 34949	35744 35553, 35563, 35473 35384 35294 35296 35117 35026 34940	35735 35645 35554 35464 35375 35197 35197 35198 35020 34932	35726 35635 35545 35455 35366 35277 35188 35099 35011 34923	35717 35526 35536 35357 35268 35179 35090 35002 34914	35708 35517 35527 35348 35259 35170 35081 34993 34995	35699 35608 35608 35429 35239 35239 35161 35073 34896	35690 35599 35599 35509 35420 35330 35241 35152 35064 34976 34888	35681 35590 35541.8 35321 35721 35723 35743 35755 34872	35672 35581 35492 35323 35323 35135 35046 349870
240.0 241.0 243.0 243.0 245.0 245.0 245.0 247.0 248.0 249.0	34861 34774 34687 34600 34513 34527 34341 34255 34169 34984	34853 34765 34678 34591 34504 34418 34332 34246 34161 34076	34844 34756 34669 34582 34496 34432 34238 34238 34152 34067	34835 34748 34660 34574 34487 34401 34315 34229 34144 34059	34826 34739 34652 54565 34478 34392 34306 34221 34135 34050	34818 34730 34642 34556 34470 34384 34298 34212 34127 34042	34809 34721 34534 34548 34548 34575 34289 34203 34118 34033	34800 34713 34626 34539 34366 34261 34195 34110 34025	34791 34704 34610 34530 34444 34352 34186 34101 34016	34783 34695 34608 34522 34435 34349 34263 34178 34098
250.0 251.0 252.0 253.0 254.0 255.0 256.0 256.0 256.0 259.0	33999 33914 33830 33746 33662 33578 33495 33412 33329 33247	33991 33906 33822 33738 33654 33570 33487 33487 33321 33238	33982 33898 33813 33729 33642 33478 33395 33395 33395	33974 33889 33805 33721 33637 23553 33470 33367 33304 33222	33965 33881 33796 33712 33629 33545 32545 33379 33296 33214	33957 33872 33788 33704 33620 33537 32553 32371 33258 33206	33948 33864 33780 33696 33612 33528 33528 33362 33262 33277	33940 33855 33771 33687 33687 33520 23537 - 33354 33271 33189	33931 33847 33763 33679 33575 33575 33429 33346 33263 33181	33983 33838 33754 33670 33567 33503 33503 33338 33255 33173
260.0 261.0 262.0 264.0 265.0 265.0 266.0 268.0 269.0	33164 33082 33081 32919 32838 32757 32575 32595 32595 32515	33156 33074 32992 32911 32530 32749 32668 32587 32507 32427	33148 33066 32984 32903 32822 32741 32660 32579 32479	33140- 33058 32976 32895 32813 32732 32652 32571 32491 32411	33132 33050 32968 32967 32805 32724 32644 32563 32483 32483	33123 33041 32960 32878 32797 32716 32636 32555 32475 32395	33115 33033 32952 32952 32789 32708 32628 32547 32467 32367	33107 33025 32943 32862 32761 32700 32620 32539 32459 32379	33099 33017 32935 32854 32773 32692 32612 32531 32451 32371	33091 33009 32927 32846 32765 32684 32603 32523 32443 32363
270.0 271.0 272.0 273.0 274.0 275.0 276.0 277.0 278.0 279.0	32355 32276 32196 32117 32036 31960 31861 31803 31725 31646	32347 32268 32188 32189 32109 31952 31874 31795 31717 31640	32339 32260 32181 32101 32023 31944 31866 31788 31788 317632	32331 32252 32173 32094 32095 31936 31858 31780 31702 31624	32323 32244 32165 32087 32928 31928 31850 31772 31694 31617	32315 32236 32157 32078 31999 31921 31842 31764 31686 31609	32308 32228 32149 321070 31991 31913 31834 31756 31671	32300 32220 32141 32062 31983 31985 31827 31749 31671 31593	32292 32212 32133 32054 31975 31897 31819 31741 31663 31586	52284 52204 52125 52046 31968 31889 31811 31733 31655 31578
280.0 281.0 283.0 283.0 284.0 285.0 285.0 285.0 285.0 289.0	31570. 31493 31416 31339 31262 31186 31110 31034 30958 30883	31562 31485 31408 31331 31255 31178 31102 31026 30951 30875	31555 31477 31470 31324 31247 31171 31095 31019 30943 30867	31547 31470 31393 31316 31239 31163 31087 31011 30935 30860	31539 31462 31365 31365 31232 31155 31079 31079 31079 310852	31531 31454 31377 31301 31224 31148 31072 30996 30920 30845	31524 31447 31370 31293 31216 31140 31064 30988 30913 30837	31516 31439 31362 31285 31209 31133 31057 30981 30905 30830	31508 31431 31354 31278 31201 31125 31049 30973 30898 30822	31501 31423 31347 31270 31194 31117 31041 30966 30890 30815
290.0 291.0 292.0 293.0 294.0 295.0 295.0 297.0 298.0	30807 30732 30657 30583 30508 30434 30360 30266 30212 30139	30800 30725 30650 30575 30501 30426 30328 30278 30205 30131	30792 307.17 305.42 30568 30493 30419 30345 30271 30197	30785 30710 30635 30550 30486 30412 30338 30264 30190 30177	30777 30702 30627 30553 30478 30404 30330 30256 30183 30109	30770 30695 30620 30545 30471 30397 30323 30249 30249 30249	30762 30687 30687 30638 30463 30463 30385 30246 30246 30095	30755 30680 30605 30530 30456 30382 30388 30234 30161 30087	30747 30672 30597 30523 30449 30375 30301 30227 30153	30740 30665 30590 30516 30441 30367 30293 30220 30146 30073
300.0 301.0 302.0 303.0 305.0 305.0 305.0 305.0 307.0 309.0	30065 29992 29917 29817 29774 29702 29658 29486 29415	30058 29985 29912 29914 29767 29695 29623 29653 29651 29479 29408	30051 29978 29978 29832 29768 29768 29516 295472 29440	30043 29970 29898 29825 29753 29680 29688 29536 29465 29393	30036 29963 29890 29818 29745 29673 29601 29529 29458 29386	30029 29956 29883 29811 29738 29666 29594 29522 29450 29379	30022 29949 29879 29803 29731 29587 29587 29585 29543 29372	30014 29941 29869 29796 297724 29652 29508 29508 29508 29365	30007 29934 29861 29789 29716 29644 29572 29501 29429 29358	30000 29927 29854 29782 29782 29637 29655 29452 29452
310.0 311.0 312.0 313.0 314.0 315.0 316.0 316.0	29343 29272 29201 29130 29060 28989 28319 28319 28779 28779	29336 29265 29194 29123 29053 28982 28912 28842 28772 28772	29329 29258 29116 29046 28905 288765 288765 28676	29322 29251 29180 29109 29039 28968 28898 28828 28758 28689	29315 29244 29173 29102 29032 28961 28891 28821 28821 28622	29308 29237 29166 29095 29025 28954 28884 28814 28675	2930 2930 29159 29159 299018 289977 288807 288807 288807 288768	29294 29223 29152 29161 29011 28940 28870 28870 28870 28661	29286 29215 29145 29174 29074 29003 28933 2863 28793 28793 28793 28654	29279 29208 29138 29167 28926 28926 28856 28786 28716 28647

TABLE IX - Continued

GEOPOTENTIAL ALTITUDE IN FEET as a function of PRESSURE IN MILLIBARS

P, mb	0.0	0.1	0.2	0.3	0;4	0,5-	:0:6==	0:7:	, O,8	0.9
320.0 321.0 322.0 323.0 324.0 325.0 326.0 327.0 329.0	28540 28571 28531 28532 285364 28296 28158 28158 2826	28633 28564 284926 284926 28357 282820 28151 28083 28015	28525 28557 28489 28419 28350 28281 28213 28144 28076	28619 28550 28481 28412 28343 28274 28206 28138 28070 28002	28612 28543 28474 28405 28336 28267 28199 28131 28063 27995	28605 28536 28467 28398 28329 28261 28192 28124 28056 27988	28598 28529 28460 28391 28322 28322 28185 28185 28185 28049 27981	28591 28522 28453 28354 28315 28247 28179 28179 28110 28042 27974	28584 28515 28446 28377 28309 28172 28172 281036 27968	28578 28508 28439 28370 28302 28233 28165 28097 28029 27961
330.0 331.0 332.0 333.0 334.0 335.0 336.0 337.0 338.0	27954 27856 27856 27819 27752 27684 27617 27551 27484 27417 27351	27947 27880 27812 27745 27578 27511 27544 27477 27611 27344	27941 27873 27805 27805 27738 27671 27604 27537 27471 27404 27338	27934 27866 27799 27731 27564 27597 27531 27464 27398 27331	27927 27859 27792 27725 277658 27591 27524 27457 27457 27391 27325	27920 27853 27785 27718 27718 27584 27517 27451 27451 27384 27318	27914 27846 27779 27711 27711 27577 27511 27444 27378 27311	27907 27839 27772 27775 27638 27571 27504 27437 27371 27305	27900 27832 27765 27698 27631 27564 27497 27431 27364 27298	27893 27826 27758 27691 27624 27557 27491 27424 27358 27292
340.0 342.0 342.0 343.0 345.0 345.0 346.0 347.0 346.0	27285 27219 27193 27193 27087 27022 26956 26891 26826 26761 26696	27278 27212 27146 27081 27015 26950 26884 26819 26754 26690	27272 27206 27140 27074 27009 26943 26813 26813 26748 26683	27265 27199 27133 27068 27062 26937 26871 26871 268741 26677	27258 27192 27127 27061 26995 26930 26565 26800 26735 26670	27252 27186 27120 27054 26989 26924 26858 26728 26728 26664	27245 27179 27114 27048 26982 269817 26852 26787 26722 26657	27239 27173 27107 27107 26976 26976 26845 26780 26716 26651	27232 27166 27100 27035 26969 26904 26839 26774 26709 26644	27225 27160 27094 27028 26963 26897 26893 26767 26703 26638
350.0 351.0 352.0 353.0 354.0 356.0 356.0	26631 26567 26503 26438 26437 26310 26247 26183 26119 26056	26625 26560 26496 26432 26368 26368 26240 261.77 261.77 261.73 26050	26619 26554 26490 26496 26361 26234 26170 26107 26043	26612 26548 26483 26419 26355 26291 26227 26164 26100 26037	26606 26541 26413 26413 26349 26285 26221 26138 26094 26031	26599 26535 26470 26470 26342 26278 26278 26215 26151 26088 26024	26593 26528 26464 26400 26336 26272 26208 26145 26081 26018	26586 26522 26458 264593 26330 26266 26202 26138 26075 26012	26580 26515 26515 26387 26323 26259 26132 26132 26069 26006	26573 26509 26445 26381 26317 26253 26189 26189 26062 25999
360.0 361.0 362.0 363.0 364.0 365.0 367.0 368.0 369.0	25993 25930 25867 25867 25742 25679 25617 25554 25492 25430	25987 25924 25861 25798 25735 25673 25610 25548 25486 25486	25980 25917 25857 25879 25792 25729 25604 25562 25418	25974 25911 25848 25785 25723 25660 25598 25596 25474 25412	25965 25905 25842 25779 25716 25654 25592 25530 25468 25406	25898 25898 25836 25773 25710 25648 25586 25586 25586 25399	25955 25829 25829 25767 25764 25642 25579 25517 25455 25393	25949 25886 25823 25760 25698 25635 25573 25511 25449 25387	25942 25880 25817 25754 25692 25629 25567 25505 25443 25381	25936 25873 25810 25748 25685 25623 25561 25499 25437 25375
370.0 371.0 372.0 373.0 374.0 375.0 375.0 376.0 378.0	25369 25307 25345 25184 25123 25062 25001 24940 24879 24818	25362 25301 25239 25178 25117 25055 24994 24934 24873 24812	25356 25295 25233 25172 25172 25149 24988 24927 24866	25350 25288 25227 25166 25104 25043 24982 24981 24861 24800	25344 25282 25221 25159 25037 24976 24915 24915 24955 24794	25338 25276 25215 25153 25153 25031 24970 24979 24949 24788	25332 25270 25209 25147 25086 25025 24964 24963 24863 24782	25325 25264 25202 25141 25080 25019 24958 24897 24836 24776	25319 25258 25135 25135 25074 25013 24952 24891 24830 24770	25313 25252 25159 25129 25068 25007 24946 24885 24824 24764
380.0 381.0 382.0 383.0 384.0 385.0 386.0 387.0 388.0	24758 24697 24697 24517 24517 24517 24451 24398 24338 24278 24278	24752 24691 24631 24571 24511 24511 24392 24332 24373 24273 24213	24746 24685 24685 24565 24505 24505 24386 24386 24386 24267 24267	24740 24679 24619 24559 24559 24439 24430 24320 24320 24201	24734 24673 24613 24553 24493 24493 24434 24374 24314 24255 24195	24728 24667 24607 24547 24587 24487 24427 24368 24308 24249 24189	24722 24661 24601 24541 24481 24481 24362 24362 24362 24384	24716 24655; 24595; 24595; 24475 24415 24356 24296; 24237 24178	24709 24649 24589 24529 24469 24409 24350 24290 24231 24172	24703 24643 24583 24523 24463 24403 24403 24284 24284 24285 26166
390.0 391.0 392.0 393.0 394.0 395.0 396.0 396.0 396.0	24150 24101 24042 23983 23924 23867 23807 23749 23690 23632	24154 24095 24095 23977 23918 23860 23861 23743 23685 23626	24148 24089 24030 23972 23912 23854 23795 23737 23621	24142 24083 24024 23967 23967 23648 23790 23731 23673 23615	24136 24077 24018 23959 23961 23784 23784 23767 23669	24130 24071 24071 24072 23954 23895 23836 23778 23720 23661 23603	24124 24065 24066 23948 23889 238772 23714 23714 23656	24118 24059 24001 23942 23883 23825 23766 23708 23650 23592	24113 24054 23995 23936 23877 23819 23760 23702 23644 23586	24107 24048 23989 23930 23871 23813 23755 23696 23638 23580
400.0 401.0 402.0 403.0 404.0 405.0 406.0 407.0 408.0	23574 23516 23459 23401 23343 23286 23229 23171 23114 23057	23568 23511 23453 23395 23395 23280 23223 23166 23109 23052	23563 23505 23447 23389 23332 23274 23217 23160 23103 23046	23557 23499 23441 23384 23326 23269 23211 23154 23097 23040	23551 23493 23435 23320 23320 23263 23146 23146 23091 23034	23545 23487 23430 23372 23315 23257 23200 23143 23086 23029	23539 23482 23424 23366 23309 23251 23194 23137 23080 23023	23534 23476 23418 23361 23303 23246 23188 23131 23074 23017	23528 23470 23412 23355 23297 23240 23183 23126 23069 23012	23522 23464 23407 23349 23292 23234 23177 23120 23063 23006
410.0 412.0 412.0 413.0 414.0 416.0 416.0 416.0 416.0	23000 22944 22887 22837 22774 22718 22661 22605 22549 22493	22938 22938 22881 22825 22712 226500 22544 22488	22989 22932 22876 22876 22763 22706 22706 22594 22538 22482	22983 22927 22870 22813 22757 22751 22545 22589 22533 22477	22976 22921 22864 22868 22751 22695 22639 22583 22527 22471	22972 22915 22859 22802 22746 22693 22577 22521 22466	22966 22910 22797 22797 22740 22684 22628 22572 22516 22460	22961 22904 22847 22791 22795 22678 22662 22566 22510 22454	22955 22898 22898 22785 22785 22617 22617 22561 22505 22449	22949 22836 22836 22780 22763 22667 22611 22555 22443

TABLE IX - Continued

P, mb	Ŏ.Ō=··	0.1	0.2	0.3	0:4	0.5	0.6	0.7	0.8	0.9°
420.0 422.0 422.0 423.0 425.0 425.0 426.0 426.0 428.0	22438 22382 22382 22371 22216 22160 22105 22055 22095 21995 21940	22432 22376 22321 22265 22210 22155 22100 22045 21990 21935	22427 22371 222015 22205 22149 22094 22039 21984 21984	22421. 22365 22310 22254 22199 22144 22089 22034 21979 21924	22415 22364 22249 22138 22083 22083 22028 21973 21919	224%0 22354 22259 22243 22133 22133 22078 22023 21968 21913	22404 22349 22293 22238 22182 22187 22072 22017 21962 21908	22399 22348 22288 22232 22172 22172 22067 22012 21957 21902		22302 22332 22277 22221 22166 22116 22056 22001 21946 21891
430.0 431.0 432.0 433.0 434.0 435.0 436.0 437.0 438.0 439.0	21886 21831 21777 21722 21668 21664 21560 21906 21908 21398	21880 21826 21771 21717 21662 21608 21554 21500 21446 21392	21875 21820 21766 21711 21657 21653 21549 214495 214495 214495	21869 21815 21.760 21766 21652 21597 21543 21489 21485 21382	21864 21809 21755 21750 21646 21535 21336 21484 21430 21376	21658 21804 21749 21695 21645 21537 21533 21479 21475 21371	21853 21798 21744 21690 21581 21527 21473 21419 21366	21848 21793 21739 21684 21670 21576 21572 21468 21414 21360	21842 21788 21733 21679 21570 21516 21462 21462 21409 21355	21837 21782 21728 21673 21673 21565 21511 21457 21403 21349
440.0 442.0 443.0 444.0 445.0 446.0 446.0 446.0 449.0	21:344 21:291 21:237 21:184 21:130 21:077 21:024 20971 20965	21339 21285 21232 21178 21125 21072 21079 20966 20913	21333 21280 21226 21173 21173 21120 21066 21069 20980 20980 20855	21328 21274 21221 21168 21174 21061 21008 20955 20955 20949	21323 21269 21216 21162 21109 21056 21003 20950 20897	21317 21264 21210 21157 211050 20997 20944 20892 20839	21312 21328 21205 21152 21045 21045 20992 20939 20836 20833	21307 21253 21200 21146 21090 21040 20987 20934 20881 20828	21301 21248 21194 21194 21141 21035 21035 20981 20989 20876 20823	21296 21242 21149 21136 21082 210976 20976 20923 20870 20818
450 ± 0 451 ± 0 452 • 0 453 • 0 455 • 0 456 • 0 457 • 0 458 • 0 459 • 0	20812 20760 20767 20655 20652 20550 20498 20496 20394 20342	20807 20754 20702 20649 20597 20545 20493 20494 20389 20337	20802 20749 20644 20592 20540 20487 20487 20435 20383 20332	20797 20744 20691 206387 20534 20482 20430 20378 20326	20791 20739 20686 20634 20581 20529 20477 20425 20373 20321	20786 20733 20681 20629 20576 20524 20472 20420 20368 20316	20781 20728 20676 20623 20571 20519 20467 20415 20363 20311	20776 20723 20670 20618 20514 20461 20409 20357 20306	20770 20718, 20513 20561 20508 20456 20404 20352	20765 20767 20660 20608 20555 20553 20451 20399 20347 20247
450.0 451.0 452.0 453.0 454.0 465.0 465.0 465.0 465.0 469.0	20290 20238 20187 20185 20084 20032 19981 19930 19879 19826	20285 20233 20182 20130 20079 20027 19976 19975 19874 19823	20280 20228 20176 20125 20073 20022 19971 19920 19869 19818	20275 20223 20171 20120 20168 20017 19966 19915 19864 19813	20269 20218 20166 20115 20063 20012 19961 19958 19858	20264 20213 20161 20109 20058 20007 19956 19904 19853 19802	20259 20207 20156 20104 20053 20002 19950 19899 19848 19797	20254 20202 20151 20099 20048 19997 19945 19843 19843 19792	20249. 201977- 20146 20094 20043 19991 19940: :9859: 19838. 19787	20244 20192 20140 20089 20038 19986 19935 19833 19782
470.0 471.0 472.0 473.0 474.0 475.0 476.0 477.0 476.0 479.0	19777 19726 19675 19625 19574 19524 19473 19423 19423	19772 19721 19620 19620 19569 19519 19468 19468 19368 19318	19767 19716 19615 19615 19564 19514 19463 19413 19413	19762 19711 19660 19659 1969 19589 19458 19458 19458	19757 19706 19655 19605 19504 19504 19453 19403 19403 19353	19752 19701 19650 19599 19549 19498 19498 19398 19348 19348	19746 19696 19645 19594 19544 19493 19493 19343 19343	19741 19691 19640 19589 19539 19488 19438 19438 19388	19736 19686 19685 19584 19534 19483 19433 19433 19333 19333	19731 19680 19630 19579 19529 19428 19428 19378 19328
480.0 481.0 482.0 483.0 484.0 485.0 486.0 487.0 488.0 489.0	19273 19223 19123 19123 19073 19074 18974 18925 18826	19268 19218 19168 19168 19168 19019 18969 18969 18870 18821	19263 19213 19153 19153 19063 19064 18964 18965 18816	19258 19158 19168 19168 19068 19009 18959 18910 18860 18811	19253 19203 19453 19103 19053 19004 18954 18955 18855 18806	19248 19148 19148 19098 19048 18999 18949 18960 18850 18801	19243 19193 19143 19093 19043 18994 18895 18846 18846	19238 19138 19138 19088 19088 18989 18989 18890 18841 18791	19233 19183 19133 19083 19083 19033 18984 18934 18835 18836	19228 19178 19128 19028 19029 18979 18980 18880
490.0 491.0 492.0 493.0 494.0 495.0 496.0 497.0 498.0	18777 18727 18678 18629 18581 18581 18532 18483 18434 18436 18337	18772 18723 18674 18625 18527 18527 18478 18429 18381 18332	18767 18718 18669 18620 18571 18522 18473 18425 18425 18376	18762 18713 18664 18615 18566 18517 18468 18420 18371	18757 18708 18659 18610 18561 18512 18464 18464 18366 18318	18752 18703 18654 18655 18556 18507 18459 18410 18361 18313	18747 18698 18649 18600 18551 18502 18454 18405 18357 18308	18742 18693 18644 18595 18546 18498 18449 18400 18352 18303	18737 18688 18639 18590 18590 18493 13444 16395 18347 18298	18732 18683 18634 18585 18537 18488 18439 18391 18394
500.0 501.0 502.0 503.0 504.0 505.0 506.0 506.0 507.0 508.0	18289 18230 18132 18144 18096 18048 18048 18000 17952 17904 17856	18284 18236 18187 18139 18091 18043 17995 17947 17899 17852	18279 18231 18183 18184 18086 18086 17990 17942 17895 17847	18274 10226 18178 18130 18081 18033 17986 17938 17890 17842	18269 18221 18175 18175 18077 18077 17981 17981 17933 17885	18265 18216 18168 18120 18072 18024 17976 17928 17880 17833	18260 18211 18163 18115 18067 18067 18019 17971 17923 17876 17828	18255 18207 18158 18110 18062 18014 17966 17919 17871 17823	18250 18202 18154 18106 18057 18009 17962 17914 17818	18245 18197 18149 18161 18053 18005 17957 17909 17861 17814
510.0 511.0 513.0 513.0 514.0 516.0 516.0 516.0 519.0	17809 17761 17714 17666 17619 17572 17524 17477 17430 17383	17804 17756 17709 17662 17614 17567 17520 17473 17426 17379	17799 17752 17754 17657 17610 17562 17515 17468 17421 17374	1.7795 1.7747 1.7700 1.7652 1.7605 1.7558 1.7510 1.7463 1.7416 1.7369	17790 17742 17695 17647 17600 17553 17506 17459 17412 17365	17785 17737 17690 17643 17595 17548 17501 17454 17407 17360	1.7780 1.7733 1.7685 1.7638 1.7591 1.7543 1.7496 1.7449 1.7402 1.7355	17776 17728 17681 17633 17586 17539 17491 17444 27397	17771 17723 17676 17628 17581 17534 17487 17440 17393 17346	17766 17718 17671 17674 17576 17529 17482 17495 17388 17341

TABLE IX - Continued

Bi-min.	0.0	0.1	0.2	0.3	0.4	0,5	Ó. 6	0.7	· 0.8	0:9
P _i mb	0.0	0.1	17327				17308		17200	17204
110 :0 113 :0	17336 17290 17243 17196 17150	17332 17285 17238 17191 17145	17280 17233 17187	1 7322 1 7276 1 7229 1 7182	17318 17271 17224 17177	17313 17266 17219 17173	17 262 17 2 15 17168	17304 17257 17210 17163	17159	17247 17201 17154 @
44 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17150 17103 17056 17010	17145 1:7098 17052 17005	17140 17094 17047 17001	17136 17089 17043 16996	17131 17084 17038 16992	17126 17080 17033 16987	17122 17075 17029 16982	17117 17070 17024 16978	17112 17066 17019 16973	17108 17061 17015 16965
8	16964 16917	16959 16913	16954 16908	16950 16904	16945. 16899	16941 16894	16936 16890	16931 16885	16927 16881	16965 16922 16876
	6871 6825	16867 16821 16775 16729	16862 16816 16770	16857 16811 < 16765	16853 16807 16761	16848 16802 16756	16544 16798 16752 16706	16 839 16 793 16747 16701	16834 16788 16742 16696	16784 16784 16738 16692
334 O	14487 16441 16596	16683	16724 16678 16632 16586	16719 16673 16628 16582	16715 16639 16623 16577	16710 16664 16618 16573	16660° 16614 16568	16695 16609 16564	16651 16605 16559	16646 16600 16554
	6550 6504 6459	16591 16545 16500 16454	16541 16495 16450	16536 16491 16445	16532 16486 16441	16527 16481 16436	16523 16477 16431	16518 16472 16427	16513 16468 16422	16509 16463 16418
14	6346 16322	16409 16363 16318	16404 16359 16313	16400 16354 16309	16395 16350 16304	1 6391 1 6345 1 6300	16386 16341 16295	16336 16291	16377 16332 16286	16372 16327 16282
\$44.0 \$44.0	16277 1623 <u>2</u> 16187	16273 16227 16182	16268 16223 16178	16254: 16218 16173	16259 16214 16169	16255 16209 16164 16119	16250 16205 16160 16115	16245 16200 16155 16110	16241 16196 16151 16106	16236 16191 16146 16101
44 0 44 0 44 0 54 0 54 0	16142 16097 16052 16007	16137 16092 16047 16002	161:33 16088 16043 15998	16126 16083 16038 15993	16124 16079 16034 15989	16074 16029 15984	16070 16025 15980	16065 16020 15975	16061 16016 15971	16056 16011 15966
	15962 15917 15873	15957 15913 13868	15953 15908 15864	15949 15904 15859	15944 15899 15 8 55	15940 15895 15850	15935 15890 15846	15931 15886 15841	15926 15881 15837	15922 15877 15832 15788
100 000 100 000 100 000 100 000 100 000	15028 15783 15739	15823 15779 15734	15819 15774 15730	15815 15770 15726	15810 15766 15721	15806 15761 15717	15801 15757 15712	15797 15752 15708	15792 15748 15703 15659	15788 15743 15699 15654
6 6 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15694 15650 15606 15562	15690 15646 15601 15557	15686 15641 15597 15553	15661 15637 15592 15548	15677 15632 15588 15544	1 5672 1 5628 1 5584 1 5539	15668 15623 15579 15535	15663 15619 15575 15531	15615 15570 13526	15610 15566 15522
149.8	19517 19473	15513 15469	15508 15464	15504 15460	15500 15456 15412	15495 15451 15407	15491 15447 15403	154 6 6 15442 15398	15482 15438 15394	15478 15434 15390
963.0 963.0 564.0 869.0	15429 15385 15341 15297	15425 15381 15337 15293	15420 15376 15332 15289	15416 15372 15328 15284	15368 15324 15280	15363 15319 15275	15359 15315 15271	15354 15311 15267	15350 15306 15262	15346 15302 15258
101.0 101.0 101.0	15254 15210 15166	15249 15206 15162	15245 15201 15157	15240 15197 15153	15236 15192 15149 15105	15232 15188 15144 15101	15227 15184 15140 15096	15223 15179 15136 15092	15219 15175 15131 15088	15214 15171 15127 15083
#70:8	15123 15079 15036	15118 15075 15031	151 14 15070 15027	15110 15066 15023	15062 15018	15057 15014	15053 15010	15049 15005	15044 15001 14957"	1504C: 14996 14953
77.0 973.0	14992 14949 14905	14988 14944 14901 14858	14983 14940 14897 14854	14979 14936 14893 14849	14975 14931 14888 14845	14970 14927 14884 14841	14966 14923 14880 14836	14962 14918 14875 14832	14914 14871 -14628	14910 14867
676 0 676 0 677 0 676 0 679 0	14862 14319 14776 14733	14815 14772 14729	14810 14767 14724	14306 14763 14720	14802 14759 14716	14798 14754 14711	14793 14750 14707	14789 14746 14703	14785 14742 14698 14656	14780 14737 14694 14651
	14690 14697	14686 14643 14600	14681 14638 14596	14677 14634 14591 14548	14673 14630 14587	14668 14626 14583	14664 14621 14578	14660 14617 14574	14613 14570 14527	14608
500 · 0	14647 14604 14561 14519 14476	14557 14514 14472	14533 14510 14467	14506 14463	14587 14544 14501 14459	14540 14497 14454	14536 14493 14450	14531 14489 14446	14484	14523 14480 14437 14395
### - 0 ### - 0 ### - 0 ### - 0	14433 14391 14348	14429 14386 14344	14425 14382 14340 14297	14420 14378 14335 14293	14416 14374 14331 14289	14412 14369 14327 14284	14408 14365 14323 14280	14403 14361 14318 14276	14399 14357 14314 14272	14352 14310 14267
	14306 14263	14301 14259	14255	14251	14246 14204 14162	14242	14238	14234 14191	14229 14187	14225 14183 14141
90.0 90.0 93.0	14221 14179 14136 14094	14217 14174 14132 14090	14212 14170 14128 14086	14166 14124 14082 14039	14162 14119 14077 14035	14157 14115 14073	14153 14111 14069 14027	14149 14107 14065 14023	14145 14103 14060 14018	14098 14056 14014
574.0 595.0 572.0 577.0	14052 14010 13968 13926	14048 14006 13964 13922	14044 14002 13960 13918	13997 13955 13914 13872	13993 13951 13909	14031 13989 13947 13905	1 3985 1 3943 1 390 1	13981 13939 13897	13976 13934 13893	13972 13930 13888
599.0	13884 13842	13880 13838	13876 13834	13830	1 3867 1 3826	13863	13859 13817	13855 13813	13851 13609	13847 13805
601.0 601.0 602.0	13759 13717 13676	13796 13713 13671	13792 -13751 13709 13667	13788 13746 13705 13663	1 3784 1 3742 1 3701 1 3659	13780 13738 13696 13655	13776 13734 13692 (13651	13771 13730 13688 13647	13767 13726 13084 13642	13763 13721 13680 13638 13597
404-0	13634 13593 13551	13630 13588 13547	13626 13584 13543	13622 13580 13539 13497	13617 13576 13535	13613 13572 13530 13489	1 360 9 1 356 8 1 352 6 1 348 5	13605 13564 13522 13481:	13601 13559 13518 13477	13555 13514 13473
606 0 607 0 609 0	13510 13468 13427	13506 13464 13423	13501 13460 13419	13456 13415	1 34 93 1 34 52 1 34 1 1	13448 13407	1 344 4 1 3402	13440 13398	13435	13431
110.0	13386	13382 13341 13300	13378 13337 13295	13374 13332 13291 13250	1 3369 1 3328 1 3287 1 3246	13365 13324 13283 13242	13361 13320 13279 13238	13357 13316 13275 13234	13353 13312 13271 13230	13349 13308 13267 13226
613.0 614.0 615.0	13263 13222 13181 13140	13259 13218 13177 13136	13254 13213 13172 13132	13209 13168 13128	1 32 05 1 31 64 1 31 23	13201 13160 13119	13197 13156 13115	13193 · 13152 13111	13189 13148 13107	13185 13144 13103
417.0 412.0 619.0	13099 13058 13017	13095 13054 13013	13091 13050 13009	13087 13046 13005	1 3083 1 3042 1 3001	13079 13038 12997	1 3074 1 3034 1 2993	13070 13030 12989	13066 13026 12985	13062 13021 12981

TABLE IX - Continued

GEOPOTENTIAL ALTITUDE IN FEET as a function of PRESSURE IN MILLIBARS

P, mb	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	.0.9
620.0 621.0 621.0 621.0 621.0 621.0 621.0 621.0 621.0	12977 12936 12895 12895 12815 12774 12734 12693 12613	12973 12932 12891 12851 12811 12770 12730 12689 12649	12969 12928 12887 12887 12886 12766 12766 12685 12685 12685	1.2965 1.2924 1.2883 1.2883 1.2862 1.2762 1.2762 1.27681 1.2681 1.2661	12960 12920 12979 12839 12758 12758 12718 12637 12637	12956 12916 12875 12835 12754 12754 12714 12633 12633	12952 12912 12871 12831 12790 12750 12750 12669 12669	12948 12908 12867 12827 12786 12746 12766 12665 12625 12625	129/4 12964 12863 12823 12782 12742 12742 127661 12661 12621	2940 12900 12859 12819 12778 12738 12698 12657 12617
430.0 432.0 433.0 435.0 435.0 435.0 436.0	2573 12493 12493 12413 12373 12373 12373 12373 12214	2569 12549 12449 12449 12329 12329 12329 12250 12210	25585555555555555555555555555555555555	12561 12521 12481 12481 12401 12361 12361 12281 12281 12282	12357 12317 12277 12238 12198	12553 12913 12473 12433 12353 12353 12313 12273 12234 12194	12549 12509 12469 12429 12349 12349 12369 12269 12269	12545 12505 12465 12465 12385 12345 12365 12266 12186	12542 12501 12461 12421 12381 12301 12301 12261 12222 12182	12537 12497 12457 12417 12377 12337 12297 12257 12218
640.0 642.0 642.0 643.0 643.0 643.0 645.0 646.0	12174 12135 12095 12096 12016 11977 11937 11898 11859 11820	12170 12131 12091 12052 12052 12012 11973 11933 11855 11816	12166 12127 12048 12008 12008 11969 11929 11850 11851	12162 12123 12083 12084 12004 11965 11986 11886 11887 11808	12158 12119 12079 12040 12040 11961 11962 11882 11843 11804	12154 12115 12075 12036 11996 11957 11958 11878 11839 11800	12150 12111 12071 12032 11992 11993 11914 11874 11835 11796	12146 12107 12067 12028 1-1988 1-1949 11949 11871 11831 11792	12142 12103 12063 12024 11985 11945 11966 11867 11827 11788	12139 12039 12059 12020 11981 11941 11902 11863 11824 11784
650 · 0 651 · 0 652 · 0 654 · 0 655 · 0 657 · 0 657 · 0	11780 11741 11702 11663 11624 11585 11547 11508 11469 11430	11777 11737 11698 11659 11620 11582 11543 11504 11465	11773 11734 11694 11695 11617 11578 11539 11530 11461 11423	11769 11730 11691 11692 11613 11574 11535 11496 11457	11765 11726 11648 11648 11609 11570 11531 11492 11495	11761 11722 11683 11644 11605 11566 11527 11488 11450	11757 11718 11679 11640 11601 11562 11523 11485 11446	11753 11714 11675 11636 11597 11558 11519 11481 11442 11403	11749 11710 11671 11632 31593 11554 11556 11477 41438 11399	11745 11706 11667 11628 11589 11550 11512 11473 11434
660.0 661.0 663.0 663.0 665.0 667.0 667.0	11392 bh:353 11314 11276 11237 11161 11122 11084 11046	11388 11349 11311 11272 11234 11195 11157 11118 11080 11042	11384 11345 11307 11268 11230 111.91 11153 11115 11076 11038	11380 11341 11303 11264 11266 11187 11149 11111 11072 11034	11376 11338 11299 11261 11222 11184 11145 11107 11069 11030	11372 11334 11295 11257 11218 11180 11141 11103 11065 11027	11368 11330 11291 11253 11214 11176 11138 11099 11061 11023	11:365 11:326 11:287 11:249 11:211 11:172 11:134 11:095 11:057	11361 11322 11284 11245 11207 11168 11130 11092 11053 11015	11357 113180 11241 11203 11164 11166 11088 11050
470.0 672.0 673.0 673.0 675.0 676.0 676.0	11008 10969 10931 10893 10855 10817 10779 10741 10704 10666	11004 10966 10927 10889 10851 10813 10776 10738 10700 10662	11000 10962 10924 10886 10848 10810 10772 10734 10696	10996 10958 10920 10882 10844 10806 10768 10730 10692 10654	10992 10954 10916 10918 10840 10802 10764 10726 10688 10651	1 0 9 8 8 1 0 9 5 0 1 0 9 5 2 1 0 8 7 4 1 0 8 3 6 1 0 7 9 8 1 0 7 6 0 1 0 7 2 2 1 0 6 8 5 1 0 6 4 7	10985 10947 10947 10908 10870 10832 10794 10757 10719 10681 10643	10981 10943 10905 10867 10829 10791 10753 10775 10677 10639	10977 10939 10901 10863 10825 10787 10749 10713 10673 10636	10973 10935 10839 10859 10821 10783 10765 10707 10670
480.0 481.0 483.0 484.0 484.0 485.0 487.0	10528 10590 10553 10515 10478 10440 10403 10265 10328	10624 10587 10549 10511 10474 70436 10399 10361 10324 10287	10621 10583 10545 10545 10470 10473 10433 10395 10350 10320	10617 10579 10541 10504 10466 10429 10391 10354 10317	10613 10575 10538 10538 10463 10463 10425 10388 10313 10375	10609 20572 10534 10496 10459 10459 10384 10386 10309	10605 10568 10530 10493 10455 10418 10343 10343 10368	10502 10564 10526 10489 10451 10414 10376 10339 10302	1 0598 1 0560 1 0523 1 0485 1 0448 1 0410 1 0373 1 0335 1 0298	10594 10556 10519 10481 10444 104069 10331 10294 10257
690.0 691.0 692.0 693.0 693.0 696.0 597.0 696.0	10253 10216 10179 10141 10104 10067 10030 9993 9956 9919	10249 10212 10175 10138 10101 10064 10026 9993 9953	10246 10208 10171 10134 10097 10060 10023 9989 9949	10242 10205 10167 10167 10130 10093 10056 10019 9932 9945 9908	10238 10201 10164 10167 10089 10052 10052 10015 9978 9941	10234 10197 10160 10123 10086 10049 10012 9975 9938 9901	10231 10193 10156 10119 10082 10045 10008 9971 9934 9897	10227 10190 10153 10115 10078 1004 10004 9967 9930 9894	1 0223 1 0186 1 0149 1 0112 1 0075 1 0001 1 0001 9964 9927 9890	10220 10182 10185 10108 10071 10034 19997 9998 9983 9886
700.0 701.0 702.0 703.0 705.0 705.0 706.0 707.0 709.0	9882 9846 9809 9772 9735 9699 9662 9589 9553	9879 9842 9805 9762 9762 9652 96525 95849	9875 9838 9802 9765 9728 9728 9655 9618 9582 9545	9871 9835 9798 9761 9724 9688 9651 9615 9578 9542	9868 9831 9794 9757 9751 9684 9648 9611 9574	9864 9827 9729 9754 9717 9644 9607 9571 9534	9860 9824 9787 9750 9713 9677 9640 9504 9567	9857 9820 9783 9746 9710 9673 9637 9600 9564 9527	9853 9816 9743 9706 9633 9596 9580 9583	9849 9813 9776 9739 9702 96629 9593 9556 9520
710.00 711.00 712.00 712.00 713.00 716.00 717.00 717.00 719.00	9516 9480 9483 9407 9371 9335 9298 9262 9262 9190	9512 94740 94403 9367 93259 9259 9259 9186	9509 9476 94300 93327 92321 9255 9219 9219	9505 9469 9432 9396 9360 9324 9287 9281 9215 9179	9502 9465 9429 9393 9356 9320 9284 9212 9176	946259 946259 943853 943853 99316 99240 99247	9494 9458 9458 9455 9349 9313 9277 9240 9204 9168	9454 9454 9418 9385 9395 9309 9277 9201 9165	9487 9451 9414 9378 9342 9306 9233 9197 9161	9483 9447 9411 9374 9338 9302 9256 9230 9194 9158

✓ TABLE IX - Continued

P, mb	0.0	0.1	-0.2	0.3	0:4	.0.5	0.6	0.7	0.8	0.9
720.0 721.0 722.0 723.0 724.0 725.0 725.0 727.0 727.0 728.0 729.0	9154 9118 9082 9046 9010 8974 8939 8903 8867 8831	9150 9114 9078 9042 9047 8971 8935 8899 8864 8828	9147 9111 9075 9039 9003 8967 8931 8896 8860 8824	9143 9107 9071 9035 8999 8964 8928 8892 8856 8821	9140 9104 9068 9032 8996 8960 8984 8889 8853 8817	9136 9100 9064 9098 8992 8956 8951 8885 8885 8885	9132 9096 9065 9025 8989 8953 8917 8881 8846 8810	9129 9093 9051 8985 8949 8914 8878 8842 8806	9089 9089 9057 8982 8946 8910 8839 8839	9122 9086 9050 9014 8978 8942 8906 8871 8835 8799
730.0 731.0 732.0 733.0 734.0 735.0 736.0 737.0 738.0 739.0	8796 8760 8725 8689 8618 8618 8583 8547 8512 8477	8792 8757 8721 8650 8655 8615 8574 8574 8509 8473	8789 8753 8753 8618 8682 8641 8576 8576 8540 8505 8470	8785 8750 8714 8678 8643 8608 8572 8537 8502 8466	8782 8746 8710 8675 8639 8604 8569 8533 8498 8463	8778 8742 8707 8636 8636 8536 85530 8494 8459	8774 8739 8768 8668 8632 8597 8562 85491 8456	8771 8735 87664 86629 8553 8553 8487 8452	8767 8732 8696 86661 8625 8555 8559 8484 8449	8764 87728 86523 86526 85516 85516 8445
740.0 741.0 742.0 743.0 744.0 745.0 746.0 746.0 747.0 748.0 749.0	8442 8406 8371 8336 8301 8266 8231 8196 8161 8126	8438 8403 8368 8333 8298 8262 8227 8192 8158 8123	8435 8394 8364 8329 8259 8259 8259 81189 81154 8119	8431 8396 8361 8326 8290 8255 8220 8135 8151 8116	8428 8392 8352 8287 8252 8217 8162 8147 8112	8424 8389 8354 8319 8283 8248 8213 8176 8144 8109	8420 83850 8315 8245 8245 8210 8175 8140 8105	8417 8382 8347 8312 8276 8241 8206 8172 8137 8102	8413 8378 8343 8308 8273 8238 8203 8168 8133 8098	8410 8375 8375 8305 8269 8234 81160 8195
750 • 0 751 • 0 752 • 0 753 • 0 754 • 0 755 • 0 757 • 0 758 • 0 759 • 0	8091 8056 8022 7987 7952 7918 7883 7848 7814	8088 8053 8018 7989 7914 7879 7845 7810 7776	8084 8049 8015 7980 7941 7876 7841 7807 7772	8081 8046 8011 7976 7942 7907 7873 7838 7803 7769	8077 8043 8008 7973 7938 7904 7869 7834 7800 7765	8074 8039 8004 7970 7935 7900 7866 7831 7796 7762	8070 8030 7966 7931 7862 7862 7823 7758	8067 8032 7997 7963 7928 7893 7859 7824 7790 7755	8063 8029 77959 77924 7890 7851 7786 7752	8060 8025 7990 7996 7986 7886 7882 7817 7783 7748
760.00 761.00 762.00 763.00 764.00 765.00 766.00 766.00 768.00 769.00	7745 7710 7676 7641 7607 7573 7539 7504 7470 7436	7741 7707 7678 7638 7604 7569 7535 7501 7467 7433	7738 7703 7635 7635 7600 7566 7532 7493 7463 7429	7734 7700 7666 7631 7537 7563 7528 7494 7460 7426	7731 7696 7662 7628 7593 7559 7555 7491 7456 7422	7727 7693 7659 7654 7590 7556 7521 7487 7453 7419	7724 7695 7695 7621 7582 7518 7480 7450	7721 7686 7652 7617 7583 7549 7515 7480 7446 7412	7717 7683 7648 7614 7580 7545 7511 7477 7443 7409	7714 7679 7645 7611 7576 7542 7508 7474 7439 7405
770.0 771.0 772.0 773.0 774.0 775.0 776.0 776.0 778.0 779.0	7402 7368 7334 7300 7266 7232 7198 7164 7130 7096	7398 7364 7330 7296 7252 7258 7194 7161 7127 7093	7395 7361 7327 7293 7259 7255 7191 7157 7157	7392 7357 7323 7289 7285 7222 7166 7154 7150 7086	7388 7354 7320 7286 7252 7218 7154 7157 7157 7083	7385 7351 7317 7283 7289 7215 7161 7167 7113 7079	7381 7347 7313 7279 7245 7217 7177 7144 7110 7076	7378 7344 7310 7276 7242 7208 7176 7140 7106 7073	7375 7340 7306 7272 7238 7205 7171 7137 7103 7069	7371 7337 7303 7269 7235 7201 7167 7167 7160 7066
780 • 0 781 • 0 782 • 0 783 • 0 785 • 0 786 • 0 786 • 0 788 • 0 789 • 0	7062 7029 6995 6961 6928 6894 6861 6827 6794 6760	7059 7025 6992 6958 6891 6857 6824 6757	7056 7028 6955 6951 6951 6854 6854 6850 6753	7052 7019 6985 6981 6981 6881 6881 6786 6786	7049 7015 6982 6948 6914 6881 6847 6514 6780 6747	7046 7012 69745 6945 6877 6844 6877 6743	7042 7009 6975 6941 6908 6874 6840 6807 6773 6740	7039 7005 6971 6938 6904 6871 6837 6804 6770 6737	7035 7002 6968 6934 6901 6867 6834 6800 6767 6733	7032 6998 6965 6931 6898 6864 6830 6797 6763 6730
790.0 791.0 792.0 793.0 794.0 795.0 796.0 796.0 798.0 799.0	6727 3693 66627 6593 6560 6527 6494 6427	6723 6690 5657 6623 6557 6557 6554 6497 6497	6720 6687: 66520 6587 65520 65520 6487 6454	47.17 6683 6650 6617 6550 5517 6451 6417	6713 6680 6647 6513 6580 6547 2514 6480 6447 6414	6710 6677 6643 6610 6577 6543 6577 6444 6411	6707 5673 6640 6507 6573 6507 6474 6474 6408	6703 6670 6637 6603 6570 6537 6504 6470 6437 6404	6700 6667 6633 6600 6567 6533 6500 6467 6434 6401	6697 6663 66397 6593 6530 6493 6464 6431 6398
801 - 0 801 - 0 802 - 0 803 - 0 805 - 0 805 - 0 806 - 0 808 - 0	6394 6361 6328 6295 6262 6262 6196 6164 6131 6098	6391 6358 6325 6292 6293 6223 6193 6128 6095	6388 6355 6329 6456 6253 6157 6157 6157	6384 6351 6318 6285 6280 6187 6154 6154	6348 6348 63152 6249 6216 6151 6151 6158	6378 6345 6312 6246 6246 6213 6187 6114 6082	6374 6341 6308 6275 6243 6210 6177 6144 6111	6371 6338 6305 6239 6206 6173 6141 6108 6075	6368 6335 6302 6269 6236 6203 6170 6137 6105	6365 6332 6299 6266 6230 6167 6134 6101 6069
510.0 512.0 512.0 513.0 514.0 515.0 515.0 515.0 515.0	6065 6033 6003 5967 5935 5908 5869 5837 5804 5772	60629 5997 5994 5994 5899 5866 5864 5861 5769	60059 5993 59948 5895 58830 58798 57765	602907 59907 59957 59957 58607 58807 57762	600197 5987 5988 5988 5856 5856 5879 57759	5049 6016 5981 5981 5986 5853 5821 5788 5756	6013 59848 59948 5985 5850 5817 5752	6042 60010 5974 5942 5879 5814 5749	6009 6006 5974 5941 5908 5876 5843 5811 5778	5003 5970 5938 5903 5903 5870 5808 58775 5743

TABLE IX - Continued

			3							
P _i mb	0.0	0.1	0,2	0.3	0.4	0.5	0,6	0.7	0.8	0:9
820.0 821.0 822.0 823.0 824.0 825.0 826.0 827.0 828.0 829.0	5740 5707 5675 5642 5610 5578 5546 5513 5449	5736 5704 5672 5632 5607 5575 5542 5510 5478 5446	5733 5701 5668 5636 5604 5571 5539 5507 5475 5443	5730 5697 5665 5633 5600 5568 5536 5536 5472 5439	5.7.2.7 5694 5662 5629 5597 5565 5533 5501 5468 5436	5723 5691 5659 5659 5594 5562 5582 5529 5465 5433	5720 5688 5655 5623 5591 5558 5526 5494 5462 5430	9717 5684 5652 5620 5588 5555 5523 5494 5459 5427	5714 56619 56617 55520 55520 5542 5542 5542 5542 5543	5710 5678 5643 5581 5589 5517 5484 5452 5420
530.0 531.0 532.0 533.0 534.0 535.0 537.0 539.0	5417 5385 5353 5321 5289 5257 5225 5193 5161 5129	5414 5352 5350 5318 5254 5222 5190 5158 5126	54178 5378 5346 5386 5285 5225 5187 5155 5123	5407 5375 5343 5311 5279 5247 5215 5183 5152 5120	5404 5372 5308 5276 5244 5212 5180 5148 5117	5401 5369 5335 5273 5249 5177 5145 5113	5398 5366 5302 5302 5270 5236 5174 5142 5110	5394 5362 5362 5298 5266 5233 5171 5139 5107	5391 5327 5327 5295 5231 5139 5136 5104	5388 5356 5324 53292 5360 5228 5196 5133 5101
841.0 841.0 842.0 843.0 843.0 845.0 846.0 846.0	5098 5066 5034 5002 4971 4939 4907 4876 4844 4813	3094 5063 5063 5099 4967 4936 4904 4873 4841 4841	5091 5059 5028 4964 4964 4933 4901 4869 4838 4806	5088 5056 5024 4993 4961 4929 4898 4866 4835 4803	5085 5053 5021 4958 4958 4956 4863 4863 4800	5082 5050 5018 4986 4955 4923 4860 4828 4797	5078 5047 5045 4983 4952 4988 4887 4887 4825 4794	5075 5042 5042 4980 4948 4917 4853 4853 4852 4791	5072 50409 4977 4945 4914 4882 4850 4819 4737	5069 5037 5005 4974 4942 4910 4819 4847 4816
850.0 851.0 852.0 853.0 853.0 855.0 855.0 855.0 856.0	4781 4750 4718 4687 4655 4624 4593 4561 4590	4778 4747 4715 4684 4652 4621 4590 4558 4527	4775 4743 4712 4681 4686 4687 4587 4555 4524	4772 4740 47709 46746 4615 4583 45521 4590	4769 4706 4674 4643 4612 4580 4589 4518 4587	4765 4734 4703 4671 4640 4608 4577 4546 4515	4.762 4731 4699 4698 4637 4605 4574 4543 4511 4480	4759 4728 4696 4665 4634 4602 4571 4540 4508 4477	4756 4725 4693 4662 4639 4599 4568 4536 4505 4474	4753 4721 4699 4659 4627 4596 4565 4533 4502 4471
560.0 862.0 862.0 863.0 865.0 865.0 865.0 865.0 867.0 865.0	4437 4405 4374 4374 4312 4281 4280 4219 4219	4465 4433 4407 4340 4399 4278 4247 4216 4185	4462 4430 4399 4368 4367 4306 4275 4244 4213 4182	4458 4427 4396 4365 4334 4303 4272 4271 4210 4179	4455 4424 4393 4362 4361 4300 4269 4207 4176	4452 4421 4359 4358 4297 4235 4235 4204 4173	4449 4418 4386 4325 4294 4263 4263 4261 4170	4446 4915 4383 4322 4290 4259 4196 4167	4443 4418 4349 4318 4287 4256 4256 4254 4164	4440 4409 4377 4346 4315 4283 4282 4191 4160
870.0 872.0 872.0 872.0 873.0 875.0 875.0 876.0 876.0	4157 4126 4096 4065 4003 3972 3942 3911 3880	4154 4123 4092 4082 4031 4000 3969 3939 3908 3877	4151 4120 4089 4058 3997 3966 3936 3936 3974	41-17 4086 4086 4025 3994 3963 3933 3902 3871	4145 4083 4052 4052 3991 3960 3930 3859	4142 4111 4080 4049 4019 3988 3957 3926 3896 3865	41-39- 4108- 4077 4046- 3985- 3954- 3953- 3893- 3862	4136 4105 4074 4043 4012 3982 3982 3982 3889 3889	4133 4102 4071 4040 4029 3979 3948 3917 3887 3856	4130 4099 4088 4037 4006 3976 3974 3884 3883
850.00 851.00 852.00 853.00 885.00 885.00 887.00 8889.00	3650 3819 3789 3758 3758 3697 3667 3636 3636 3575	3647 3816 3736 3735 3725 3694 3664 3633 3603 3572	3844 3813 3783 3752 3752 3691 3661 3600 3600 3569	3841 3810 3779 3749 3718 3688 3658 3657 3597	3838 3807 3776 3746 3715 3685 3654 3654 3654 3594 3563	3835: 3894 37743 3712 3682 3651 3621 3591 3560	3831 3801 3770 3740 3709 3679 3648 3618 3588 3557	3828 3798 3767 3737 3706 3676 3645 3615 3585 3585	3825 3794 3734 3734 3703 3673 3642 3612 3581 3581	3822 3792 37961 3731 3700 3670 3639 3578 3548
890.0 891.0 892.0 893.0 895.0 895.0 895.0 895.0 897.0	3545. 3515 3484 3454 3484 3394 3364 3303 3303 3273	3542 3512 3451 3451 3421 3391 3361 3330 3270	3539 3509 3478 3448 3388 3388 3388 3387 3277 3267	3536 3506 3475 3445 3415 3385 3355 3354 3294 3264	3533 3503 3472 3472 3412 3302 3351 3321 3291 3261	3530 3500 3469 3469 3409 3379 3348 3318 3288 3288	3527 3497 3456 3436 3406 3376 3345 3315 3285	3524 3494 3463 3433 3403 3373 3342 3312 3282 3252	3521 3491 3460 3450 3470 3370 3339 3379 3279 3249	3518 3487 3487 3427 3397 3336 3276 3276
900.0 902.0 902.0 903.0 905.0 905.0 907.0 908.0	3243 3213 3183 3183 3153 3193 3093 3063 3003 2974	3240 3210 3180 3180 3120 3090 3090 3030 3030 3097.1	3237 3207 3177 3147 3117 3087 3057 3027 2998 2968	3234 3204 3174 3114 3114 3054 3054 2995	3231 3201 3171 3141 3111 3081 3051 2992 2962	3228 3198 3168 3138 3178 3078 3048 3048 32989	3225 3195 3165 3135 3105 3075 3045 3015 2986 2986	2520 2616 2616 2616 2616 2706 2706 2106 2802 2802 2802	3219 3189 3189 3129 3089 3089 3089 3089 2980	2216 3186 3186 3186 3096 3036 3006 2977 2947
910-0 911-0 912-0 913-0 913-0 915-0 915-0	2944 2914 2884 2855 21795 27766 27766 27766 27766	2941 29911 2881 2882 2882 2793 27733 2703 2674	2938 2908 2878 2849 2819 2789 2780 2730 2730 2730	2905 2876 2876 2816 27757 2757 2757 2766	2932 2972 2873 2813 2752 2752 2752 2655	29999 28640 28640 2772 2772 266	2926 2896 2866 2867 2877 2718 2718 2689	2923 2893 2894 2874 2874 2774 2656	2920 2890 2891 2831 2871 27742 27742 27683	2917 2987 2958 2958 22769 2769 2769 2650

TABLE IX - Continued

GEOPOTENTIAL ALTITUDE IN FEET as a function of PRESSURE IN MILLIBARS

			* **							
P, mb	0.0	1.0	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
920.0 921.0 922.0 923.0 923.0 925.0 925.0 927.0 928.0 929.0	2647 2618 2588 2589 2529 2520 2470 2441 2441 2382	2644 2615 2585 2556 2526 2497 2468 2409 2380	2641 2612 2582 2583 2523 2494 2465 2406 2377	2638 2609 2579 2520 2520 2491 2462 2403 2374	2635 2606 2576 2547 2518 2488 2489 2429 2400 2371	2632 2603 2573 2574 2515 2485 2456 2426 2397 2368	2629 2500 2571 2512 2512 24853 2424 2394 2365	2627 2597 2598 2538 2509 2479 2479 2421 2391 2362	2624 2598 2535 2535 2506 2477 2418 2388 2359	2621 2562 2533 2573 2473 2415 2386 2386
930.0 931.0 932.0 933.0 934.0 936.0 937.0 938.0 939.0	2353 2355 2265 2265 2236 22176 2176 2149 2149 2191	2350 2321 2292 2263 2263 2204 2175 2117 2086	2347 2318 2269 2260 2230 22172 21143 2114 2085	2344 2315 2286 2257 2228 2198 2140 2111 2082	2341 2312 2283 2254 2225 2166 2137 2108 2079	2339 2309 2280 2251 2222 2193 2163 2134 2105 2076	2336 2306 2277 2248 2219 2190 2161 2131 2102 2073	2533 2303 2245 2245 22167 22158 22129 2070	230 2301 2242 2242 2213 2185 2126 2097 2068	2278 2278 22768 2239 22181 22182 20182 20065
940.0 941.0 942.0 943.0 943.0 945.0 945.0 945.0 945.0 949.0	2042 2033 2003 1975 1946 1917 1858 1859 1830 1802	2059 2030 2001 1972 1943 1914 1885 1885 1856 1827 1799	2056 2027 1998 1969 1940 1911 1882 1853 1825	2053 2024 1.995 1.966 1.937 1.908 1.879 1.851 1.822 1.793	2050 2021 1992 1963 1934 1905 1876 1848 1819 1790	2047 2018 1989 1960 1931 1902 1874 1845 1816 1787	2044 2015 1936 1957 1928 1900 1571 1842 1813 1784	2041 2012 1983 1955 1926 1897 1868 1839 1810 1781	2039 2010 1981 1952 1923 1894 1865 1836 1807 1779	2036 2007 1978 1949 1920 1891 1862 1833 1804
950.0 951.0 952.0 953.0 953.0 955.0 956.0 957.0 959.0	1773 1744 1715 1687 1658 1629 1601 1572 1543 1515	1770 1741 1712 1655 1655 1626 1598 1569 1540 1512	1.767 1.738 1.710 1.651 1.652 1.652 1.595 1.596 1.538 1.509	1764 1735 1707 1678 1649 1621 1592 1563 1535 1506	1761 1732 1734 1675 1646 1618 1589 1560 1532 1503	1758 1730 1701 1672 1644 1615 1586 1588 1529 1500	1755 1727 1698 1669 1641 1612 1583 1555 1526 1498	1753 1724 1695 1666 1638 1609 1552 1552 1553 1495	1750 1721 1664 1635 1606 1578 1549 1520 1492	1747 1716 1689 1661 1632 1503 1575 1546 1518
960.0 961.0 963.0 963.0 965.0 965.0 965.0 967.0 968.0	1486 1458 1429 1401 1372 1344 1315 1257 1259	1483 1455 1426 1398 1369 1341 1313 1284 1286 1228	1481 1458 1424 1395 1367 1338 1310 1287 1253 1255	1478 1449 1421 1322 1364 1335 1307 1279 1250 1222	1475 1446 1418 1389 1361 1333 1304 1276 1247 1219	1472 1443 1415 1387 1358 1330 1301 1273 1245 1216	1469 1441 1412 1384 1355 1327 12270 1242 1213	1466 1438 1409 1381 1352 1324 1296 1267 1239 1211	1463 1436 1406 1376 1350 1321 1223 1264 1236	1461 1432 1404 1375 1347 1318 1290 1262 1233 1205
970.0 971.0 972.0 973.0 974.0 976.0 977.0 978.0 979.0	1202 1174 1146 1117 1089 1061 1033 1005 977	1199 1171 1143 1115 1086 1058 1030 1002 974 946	1196 1168 1140 1112 1084 1055 1027 999 971 943	1194 1165 1137 1109 1081 1053 1024 996 968 940	1191 1163 1134 1106 1078 1050 1022 993 965 937	1188 1160 1131 1103 11075 1047 1019 991 962 934	1185 1157 1129 1100 1072 1044 1016 988 960 932	1182 1154 1126 1098 1069 1041 1013 985 985 987	1179 1151 1123 1095 1067 1035 1010 982 954 926	1177 1148 1120 1092 1064 1036 1007 979 951 923
980.0 981.0 982.0 983.0 984.0 985.0 986.0 987.0 988.0	920 892 864 836 808 782 725 697 669	918 890 861 834 806 778 750 722 694 666	915 887 859 831 803 775 747 719 691 663	912 884 856 828 800 772 744 716 688 660	909 881 853 825 797 769 741 713 685 658	906 878 850 822 794 766 738 711 683 655	904 876 847 820 792 764 736 708 680 652	901 873 845 817 789 761 733 705 677 649	898 870 842 814 786 758 730 702 674 647	595 867 839 783 7557 692 644
990.0 991.0 992.0 993.0 993.0 996.0 996.0 997.0 998.0	641 613 585 538 530 502 474 447 419 391	636 610 583 555 527 499 474 446 389	608 580 552 524 497 469 441 414 386	633 605 577 521 521 494 466 438 411 383	630 602 574 519 519 491 463 436 408 380	627 599 571 544 516 488 461 433 405 378	624 596 5641 513 485 450 402 375	621 594 566 538 510 483 455 427 400 372	619 591 563 535 508 480 482 425 397 369	616 588 550 533 505 477 449 422 394 367
1000.0 1001.0 1003.0 1003.0 1003.0 1005.0 1005.0 1007.0	364 336 309 281 254 229 471 414	361 333 306 278 251 223 196 168 161	358 331 303 276 246 221 193 166 3138	356 328 300 273 245 218 190 163 135 108	353 325 296 2770 243 215 186 133	295 267 240 212 165 157 130	347 320 292 265 237 210 155 127 100	344 317 289 262 234 207 179 124 97	342 314 287 259 232 204 177 149 122 94	339 311 256 229 201 174 1192
1010.0 1011.0 1012.0 1013.0 1013.0 1015.0 1015.0 1017.0 1018.0	89 61 77 -20 -48 -75 -129 -129	23 -59 -23 -50 -78 -105 -132 -159	83 56 29 1 -26 -53 -80 -108 -135 -162	81 53 26 -1 -29 -56 -83 / -810 -138 -165	78 51 23 -4 -31 -59 -86 -113 -140 -168	75 46 20 27 -34 -61 -89 -143 -170	72 45 18 -10 -37 -91 -119 -146 -173	70 42 15 -12 -40 -94 -121 -149 -176	67 40 12 -15 -470 -97 -124 -151 -178	64 37 10 -18 -45 -72 -100 -127 -154 -181

TABLE IX - Continued

P, mb	0.0	0.1	0.2	Q. 3	0.4	0.5	0.6	0.7	0.8	0.9
1020.0 1021.0 1023.0 1023.0 1025.0 1025.0 1026.0 1027.0 1028.0	-184 -211 -238 -265 -295 -319 -346 -373 -400 -427	-187 -214 -241 -268 -295 -322 -346 -403 -430	-189 -216 -244 -271 -298 -325 -352 -352 -406 -433	-192 -219 -246 -273 -200 -328 -355 -382 -409 -436	-195 -222 -249 -276 -303 -357 -357 -384 -411 -438	-197 -225 -252 -279 -306 -333 -360 -367 -414 -441	-200 -227 -254 -282 -309 -336 -363 -390 -444	-203 -230 -257 -281 -311 -338 -365 -392 -419 -446	-206 -233 -260 -287 -314 -341 -368 -395 -422 -449	-208 -235 -263 -290 -317 -344 +371 -398 -425 -452
1030.0 1031.0 1033.0 1033.0 1035.0 1035.0 1037.0 1036.0 1039.0	-454 -481 -508 -535 -569 -616 -643 -669 -696	-457 -484 -511 -535 -592 -615 -645 -699	-460	-463 -489 -516 -543 -570 -597 -624 -651 -677 -704	-465 -492 -519 -516 -573 -626 -653 -680 -707	-468 -495 -522 -549 -602 -629 -656 -683 -710	-471 -498 -524 -551 -578 -605 -639 -685 -712	-473 -500 -527 -554 -608 -635 -661 -688 -715	-476 -503 -530 -557 -584 -610 -637 -664 -691 -718	-479 -536 -539 -586 -613 -647 -693 -720
1040 e 0 1041 e 0 1042 e 0 1042 e 0 1044 e 0 1045 e 0 1047 e 0 1048 e 0 1049 e 0	-723 -750 -776 -803 -830 -883 -910 -936 -963	-726 -752 -7752 -806 -832 -859 -866 -912 -939 -965	728 755 752 808 835 862 888 915 941	-731 -758 -754 -811 -838 -864 -891 -918 -944	-734 -760 -787 -814 -840 -867 -894 -920 -947 -973	-736 -763 -7916 -816 -843 -870 -896 -923 -949	-739 -766 -792 -819 -872 -872 -896 -926 -952	-742 -768 -793 -822 -848 -875 -902 -928 -955 -981	7744 7771 7788 -854 -851 -878 -904 -931 -957	-747 -774 -807 -827 -854 -880 -907 -933 -960 -
1050.0 1051.0 1053.0 1053.0 1054.0 1055.0 1056.0 1057.0 1058.0	-989 -1016 -1042 -1069 -1095 -1122 -1148 -1174 -1201 -1227	-992 -1018 -1045 -1071 -1098 -1124 -1177 -1203 -1236	-995 -1021 -1048 -1074 -1101 -1127 -1153 -1180 -1206 -1232	-997 -1024 -1057 -1077 -1130 -1130 -1132 -1209 -1235	-1000 -1026 -1053 -1079 -1106 -1132 -1159 -1159 -1211 -1238	-1023 -1029 -1056 -1082 -1108 -1135 -1161 -1188 -1214 -1240	-1005 -1032 -1058 -1085 -1111 -1138 -1164 -1190 -1217 -1243	-1008 -1034 -1061 -1087 -1114 -1140 -1167 -119 -1219 -1246	-1010 -1037 -1063 -1090 -1116 -1143 -1169 -1196 -1222	-1013 -1040 -1066 -1093 -1119 -1145 -1178 -1225 -1251
1060.0 1061.0 1062.0 1063.0 1064.0 1065.0 1067.0 1067.0 1068.0	-1254 -1280 -1306 -1332 -1389 -1385 -1411 -1464 -1490	-1256 -1283 -1309 -1335 -1361 -1388 -1414 -1466 -1492	~1259 -1285 -1311 -1338 -1364 -1360 -1416 -1443 -1469 -1495	-1261 -1288 -1314 -1340 -1367 -1393 -1419 -1471 -1471	-1264 -1290 -1317 -1343 -1369 -1369 -1422 -1448 -1474 -1500	-1267 -1293 -1319 -1346 -1372 -1398 -1424 -1450 -1477 -1503	-1269 -1296 -1322 -1348 -1374 -1402 -1427 -1427 -1453 -1479 -1505	-1 2721 278 -1 325 -1 351 -1 377 -1 403 -1 430 -1 456 -1 462 -1 508	-1275 -1301 -1327 -1353 -1380 -1406 -1432 -1458 -1465 -1511	-1277 -1304 -1330 -1356 -1382 -1409 -1435 -1461 -1487 -1513
1070.0 1071.0 1072.0 1073.0 1074.0 1075.0 1076.0 1077.0 1078.0	-1516 -1542 -1594 -1620 -1620 -1672 -1678 -1750	-1518 -1545 -1571 -1571 -1623 -1649 -1675 -1727 -1727 -1753	-1521 -1547 -1573 -1599 -1625 -1678 -1704 -1709 -1755	-1524 -1550 -1576 -1602 -1628 -1654 -1680 -1706 -1732 -1758	-1526 -1552 -1579 -1605 -1631 -1663 -1709 -1705	-1529 -1555 -1555 -1607 -1639 -1685 -1711 -1737 -1763	-1532 -1558 -1584 -1610 =1635 -1662 -1688 -1714 -1740	-1534 -1560 -15612 -1612 -1638 -1669 -1691 -1716 -1742 -1768	-1537 -1563 -1589 -1615 -1641 -1667 -1693 -1719 -1771	-1539 -1565 -1592 -16144 -1670 -1696 -1722 -1748 -1774
1080.0 1081.0 1082.0 1083.0 1084.0 1085.0 1086.0 1086.0 1088.0	-1776 -1802 -1828 -1854 -1860 -1906 -1931 -1957 -1983 -2009	-1779 -1805 -1831 -1857 -1882 -1908 -1934 -1960 -1986 -2011	-1781 -1807 -1833 -1859 -1885 -1911 -1937 -1962 -1988	-1784 -1810 -1836 -1862 -1888 -1913 -1939 -1965 -1991 -2017	-1787 -1812 -1838 -1864 -1890 -1916 -1942 -1968 -1993 -2019	-1789 -1815 -1841 -1867 -1893 -1919 -1944 -1970 -2022	-1792 -1818 -1844 -1869 -1895 -1921 -1947 -1973 -1999 -2024	-1794 -1820 -18472 -1898 -1924 -1925 -1975 -2007	-1797 -1823 -1849 -1875 -1900 -1926 -1952 1978 -2004 -2029	-1800 -1825 -1851 -1871 -1903 -1929 -1955 -1980 -2005
1090.0 1091.0 1092.0 1093.0 1094.0 1095.0 1096.0 1096.0 1098.0	-2035 -2060 -2066 -2112 -2137 -2163 -2189 -2214 -2240 -2266	-2037 -2069 -2114 -2140 -2166 -2191 -2242 -2268	-2040 -2065 -2065 -2117 -2143 -2168 -2194 -22194 -2245 -2271	-2042 -2068 -2069 -2119 -2117 -2171 -2192 -2248 -2273	-2045 -2071 -2071 -2192 -2148 -2173 -2199 -2225 -2250 -2276	-2047 -2073 -20729 -2150 -2150 -2172 -2227 -2227 -2258	-2050 -2076 -2101 -2153 -2158 -2204 -22255 -2281	-2053 -2078 -21130 -21155 -21167 -22132 -22258 -2283	-2051 -20107 -21138 -211809 -22236 -22236 -22286	-2058 -2083 -2109 -2135 -2136 -22186 -22137 -2263 -2289
1100.0 1101.0 1102.0 1103.0 1104.0 1105.0 1106.0 1107.0 1108.0	-2291 -2317 -2355 -2355 -2359 -2419 -2449 -2469 -2520	-2294 -2319 -2315 -2316 -2321 -2421 -2447 -2497 -2493	-2296 -2322 -23373 -23398 -2439 -2449 -2450 -2525	-2299 -2350 -2375 -2426 -2452 -2477 -2528	-2301 -2327 -23578 -23578 -2459 -2454 -24805 -2530	-23355 -2355 -2355 -2356 -2457 -2457 -2458 -2533	-23573 -23573 -2358 -24439 -244685 -244685 -2253	-2334 -2334 -2360 -2385 -2436 -2436 -2462 -2462 -2463 -2538	-2312 -2337 -2363 -2388 -2439 -2464 -24915 -2541	-2314 -2340 -2365 -2391 -2416 -2467 -2467 -2518 -2543
1110.0 1111.0 1112.0 1113.0 1113.0 1115.0 1117.0 1117.0 1117.0	-2546 -2571 -2596 -2647 -2647 -2698 -2723 -2773	-2574 -2574 -2599 -2690 -2670 -2670 -2775 -2776	-2551 -2576 -2601 -2607 -2652 -2657 -2703 -2753 -2753 -2778	-2579 -2604 -2609 -2680 -2705 -2736 -2736 -2781	-2556 -25606 -2602 -26682 -26682 -27736 -27753	-2558 -2584 -2609 -2609 -2685 -27105 -2761 -2766	42566 -2612 -2613 -2633 -2633 -2683 -27138 -27738 -27788	-2563 -2589 -2614 -2639 -2690 -2715 -2746 -27766 -2779!	-2566 -2591 -2612 -2642 -2642 -2718 -2718 -2768 -2768	-2568 -2594 -2619 -2644 -2695 -2772 -2771 -2796

GEOPOTENTIAL ALTITUDE IN FEET as a function of PRESSURE IN MILLIBARS

P, mb	0.0	0.1	0.2°	0.3	0.4	0.5	0.6	0.7	0.8	09
1120.0 1121.0 1122.0 1123.0 1124.0 1125.0 1125.0 1126.0 1128.0 1128.0	-2178 -2824 -2874 -2874 -2924 -2949 -2974 -2979 -3024	-2801 -2826 -2851 -28576 -2901 -2927 -2957 -3002 -3027	-2803 -2829 -2829 -2859 -2879 -2929 -2954 -29579 -3004 -3029	-2806 -2831 -2856 -2881 -2907 -2932 -2957 -2982 -3007 -3032	-2808	-281-1 -2836 -2861 -2886 -2912 -2917 -2962 -2987 -3012 -3037	-2814 -2839 -2864 -2889 -2914 -2939 -2964 -2964 -3014 -3039	-2816 -2641 -2866 -2891 -2917 -2917 -2967 -2967 -2992 -3017 -3042	-2819 -2844 -2869 -2894 -28919 -2944 -2969 -2904 -3019 -3044	-2824 77 -2846 -2871 -2896 -2922 -2947 -2972 -2972 -3022 -3047
1130.0 1131.0 1132.0 1132.0 1134.0 1135.0 1136.0 1136.0 1137.0	-3049 -3074 -3099 -3124 -3149 -3199 -3224 -32249 -3274	-3052 -3077 -3107 -3152 -3152 -3177 -3202 -3251 -3276	-3054 -3079 -3104 -3154 -3179 -3209 -3229 -3254 -3279	-3057 -3082 -3107 -3132 -3157 -3182 -3206 -3231 -3256 -3281	-3059 -3084 -3109 -3159 -3159 -3264 -3234 -3259 -3284	+3062 -3087 -3112 -31137 -3162 -3167 -3211 -32361 -3286	-3064 -3089 -3114 -3139 -3164 -3189 -3214 -3239 -3264 -3289	-3067 -3092 -3117 -3142 -3167 -3192 -3216 -3246 -3291	-3069 -3094 -3119 -3144 -3169 -3194 -3219 -3244 -3269 -3293	-3072 -3097 -3122 -3147 -3177 -3177 -3221 -3221 -3271 -3296
1140.0 1141.0 1142.0 1142.0 1144.0 1145.0 1146.0 1147.0 1147.0	-3298 -3323 -3348 -3373 -3398 -3492 -3447 -3476 -3496	-3301 -3326 -3351 -3375 -3400 -3425 -3450 -3474 -3499 -3524	-3303 -3328 -3353 -3378 -3403 -3427 -3452 -3457 -3501 -3501	-3306 -3331 -3356 -3350 -3405 -3430 -3454 -3454 -3504 -3529	-3308 -3333 -3358 -3363 -3408 -3432 -3457 -3482 -3506 -3531	-3311 -3336 -3385 -3385 -3410 -3459 -3459 -3469 -3533	-3313 -3338 -3363 -3363 -3412 -3417 -3467 -3487 -3511 -3536	-3316 -3341 -3390 -3390 -3445 -3464 -3464 -3469 -3514 +3538	-3318 -3343 -3368 -3393 -3417 -3442 -3467 -3516 -3541	-3321 -3346 -3370 -3395 -3425 -3445 -3469 -3499 -3519 -3543
1150.0 1151.0 1152.0 1153.0 1154.0 1155.0 1155.0 1155.0 1157.0	-3546 -3570 -3520 -3620 -3644 -36693 -3718 -3718	-3548 -3573 -3598 -3622 -3627 -3671 -3696 -3720 -3745 -3769	-3551 -3575 -3600 -3625 -3674 -3698 -3723 -3747 -3772	-3553 -3578 -3602 -3627 -3652 -3676 -3701 -3725 -3750 -3774	~3556 -3580 -3605 -3630 -3654 -3679 -3703 -3728 -3752	-3558 -3583 -3687 -3632 -3657 -3657 -3706 -3730 -3755 -3779	-3561 -3585 -3510 -3614 -3659 -3684 -3708 -3738 -3757 -3782	-3563 -3588 -3612 -3637 -3661 -3666 -3711 -3735 -3760 -3784	-3566 -3590 -3615 -3639 -3664 -3713 -3713 -3738 -3762 -3787	-3568 -3593 -3612 -3642 -3666 -3691 -3715 -3740 -3765 -3789
1160.0 1161.0 1162.0 1162.0 1164.0 1165.0 1165.0 1167.0 1168.0 1169.0	-3791 -3816 -3840 -3865 -3889 -3914 -3938 -3962 -3987 -4011	-3794 -3818 -3843 -3867 -3916 -3940 -3965 -3989 -4013	-3796 -3821 -3845 -3970 -3894 -3919 -3943 -3967 -3992 -4016	-3799 -3823 -3848 -3872 -3897 -3921 -3945 -3970 -3994 -4018	-3801 -3826 -3850 -3875 -3879 -3923 -3948 -3978 -3996 -4021	-3804 -3828 -3853 -3877 -3901 -3926 -3950 -3975 -3999 -4023	-3806 -3831 -3855 -2879 -3979 -3928 -3953 -3977 -4001 -4026	-3809 -3833 -3882 -3906 -3931 -3955 -3979 -4008	-3811 -3835 -3860 -3884 -3909 -3933 -3958 -3958 -4006 -4031	-3813 -3838 -3862 -3887 -3911 -3936 -3960 -3984 -4009 -4033
1171.0 1171.0 1172.0 1173.0 1173.0 1174.0 1176.0 1176.0 1177.0	-4035 -4064 -4108 -4132 -4132 -4181 -4205 -4253	-4038 -4062 -4086 -41135 -4159 -4159 -4238 -4238	-4040 -4065 -4089 -41137 -41162 -4186 -4210 -4234 -4258	-4043 -4067 -4091 -4116 -4140 -4164 -4188 -4212 -4237 -4261	-4045 -4069 -4094 -4118 -4142 -4166 -4191 -4215 -4239 -4263	-4048 -4072 -4072 -4120 -4145 -4169 -4193 -4217 -4241 -4266	-4050 -4074 -4099 -4123 -4147 -4171 -4195 -4220 -4244 -4268	-4052 -4077 -4105 -4149 -4174 -4198 -4222 -4246 -4270	-4055 -4079 -4103 -4128 -4152 -4176 -4200 -4224 -4273	-4057 -4082 -4106 -4134 -4154 -4178 -4203 -4227 -4251 -4275
1180.0 1181.0 1182.0 1183.0 1184.0 1185.0 1186.0 1186.0 1189.0	-4278 -4302 -4350 -4354 -4358 -4374 -4392 -4496 -4496	-4280 -4304 -4328 -4328 -4376 -4471 -4425 -4473 -4497	-4282 -4307 -4331 -4355 -4379 -4403 -4427 -44675 -4499	-4285 -4309 -4333 -4357 -4381 -4485 -4429 -4453 -4453	-4287 -4311 -4336 -4360 -4364 -4408 -4408 -4408 -4408 -4400 -4504	-4290 -4314 -4336 -4356 -4414 -4458 -4458 -4456	-4292 -4316 -4340 -4368 -4413 -4437 -4461 -4465 -4509	-4295 -4319 -4367 -4391 -4419 -4463 -4461 -4451	-4297 -4321 -4345 -4369 -4393 -4317 -4441 -4465 -4489	-4299. -4328 -4372 -4396 -4439 -4444 -4468 -4492 -4516
1190.0 1191.0 1192.0 1193.0 1193.0 1195.0 1196.0 1196.0 1197.0	-4518 -4542 -4566 -4596 -4638 -4638 -4686 -4686 -4709 -4733	-4521 -4545 -4569 -4569 -46640 -4664 -4668 -4712 -4736	-4523 -4547 -4571 -4575 -4667 -4667 -46714 -4738	-4525 -4549 -4573 -4592! -4645 -4669 -4693 -46717 -4740	-4528 -4552 -4576 -46024 -4647 -4647 -4671 -4671 -4719 -4719	-4530 -4554 -4578 -4602 -4626 -4650 -4678 -4721 -4721	-4533 -4557 -4580 -4604 -4652 -4652 -4676 -4700 -4724 -4746	-4535 -4559 -4563 -4607 -4631 -4655 -4678 -4702 -4726 -4750	-4537 -4561 -4565 -4609 -4633 -4657 -4657 -4705 -4729 -4752	-4540 -4564 -4568 -4615 -4659 -4687 -4731 -4731

TABLE IX - Concluded

P, mb	0	Ĺ	2	3	4	- · 5	6		- 1 - 4 .8 7500 48	: : : : : : :
1200.	-4757	-4.781	-4805	-4829	~4852	-4876	-4900	-4923	-4947 -5183	-4971 -5207
1210.	-4994	-5018	-5042	-5065	-5089	-5113	-5136 -5371	-5160 -5394	-541B	-5441
1220.	-5230	-5254	-5277	-5301	-=5324	~5348 ~5581	-5604	-5627	-5651	-5674
3230.	-5464	-5488	-5511	-5534 -5767	-5558 -5790	- 581		5359		್- ಕರಕಿತ
1240.	-5697 -5928	-5720: -5951	-5743 -5974	-5997	-6020	-6043	-6066	-6089	-51:12	-51:35
1250 · 1260 ·	-6155	-6181	-6204	-6227	-5249	-6272	-6295	-6318	-6341	-6363
1270.	-6386	-6409	-6432	-6454	-6477	-6500	-6522	-6545	-6568	-6590
1260	-6613	- 6635	~6658	-6681	-6703	-6726	-6748	-6771	-6793	-6816
1290.	-6838	-6861	-6383	-6905	-6928	-6950	-2073	÷6995	-70x7	T040
1300.	-7062	~7084	-7107	-7129	-7151	-7173	-7196	77.00	7240	-7262 -7484
1300:	 7285	≗ 7307	-7329	-7351	-7373	-7395	-7417 -7538	-7446 -7660	-7682 ·	7704
1320.	-7506	-7528	-7550	-7572	-7594 -7813	-7616 -7835	-7837	-7879	-7900	-7922
1330.	-7725	-7.74.7	-7769	-7791	-8031	-8053: -	-8074	-8096	-8116	-8139
1340.	-7944	-7966	-7987 -8204	-8009 -8226	-8248:	-8269	-8291	-8312	-8334	-8355
1350	-8161 -8377	-8183 -8398	-8420	-8441	-8463	8484	-8506	-6527	-8349	-8570
1360	-8591	-8613	-8534	-8656	-8677	-1408	=8720	-8741	-6762	-9763
1380	-8805	-8826	-8847	-8868	-8890	-8911	-8932	-8953	-8974	-8996 -9207
1390	-9017	-903A	-9059	-9080	-91 01	-9155	-9143	-9164	-9186	
1400.	-9228	~9249	-9270	-9291	-9312	-9333	-9354	-9374	-9395	-9625
1410.	-9437	-9458	-9479	-9500	-9521	-9542	-9562	-9583 -9791	-9604 -9811	-9832
1420	-9646	-9666	-9687	-9708	-9729	~9749	-9770 -9977	-9997	-10018	-10038
1430%	~9853	-9873	-9894	-9915	-9935	-9956 -10161	-10182	-10202	-10223	-10243
1440	-10059	-10079	-10100	-10120 -10325	-10141 -16345	-10366	-10386	-10406	-10427	-10447
1450	-10264	-10264	-1.0305 -1.0508	-10528	-10549	-10569	-10589	=10609	-10630	-10650
1460.	-10467	-10488 -10690	-10710	-10731	-10751	-10771	~1079i	-10811	-10831	-10851
1470	-10670 -10872	-10892	-10912	-10932	-10952	-10972	-10992	-11012	-11032	-11052
1490.	-11072	-11092	-11112	-1,1132	-11:152	-11172	-11192	-11212	-1,1232	-11251
1500.	-11271	-11291	-11311	~11331	-11351	-11371	-11390	-11410	-11430	-11450
1510.	-11470	-1 1489	-11509	-11529	-11549	-11568	-11588	-11608	-11627	-11647 -11843
1520.	-11.667	-11686	-1.1706	-11725	-11745	~11765	-11785	-11804	-11824 -12019	-12039
i 530.	-11863	-1:1002	-11902	-11922	-1:1941	-11981	-11980 -12175	-12000 -12194	-12213	-12233
1540 .	-12058	-12077	-12097	-12116	-12136	-12155 -12349	-12368	-12367	-12407	-12486
1550.	-12252	-12271	-12291	-12310	~12329 ~12522	=12541	-12560	-12580	-12599	-12618
1560 -	-12445	-12464	-12484 -12675	~12503 ~1 2695	-12714	-12733	-12752	-12771	-12790	-12609
1570.	-12637	-12656 -12847	-12866	-12885	-12904	-12923	-12942	-12961	-12980	-12999
1580± 1590•	-12828 -13018	-13037	-13056	-13075	-i 3094	-13113	-13132	-13151	-13170	-13189
1400	-17600	1 7226	-13245	-13264	-13283 -13471	-13302 -13489	-13321	-13339	-13358	-13377
1600.	-13208 -13396	-13226 -13414	-13433	-13264 -13452	-13471	-13489	-13508	-13527	-13546	-13 564 -13751
1620.	-13583	-13602	-13620	-13639	-13658	-13676	~1.3695	~13713 ~13899	-13732 -13918	-13936
1630.	-13769	-13788	-13806	-13825	-1/3843	-13862	-13881 -14005	-14084	-14102	-14121
1640.	-13955	-13973	-13992	-14010	-14029	-14047 -14231	-14249	-14268	-14286	-14304
1650.	-14139	-14157	-14176	-14194	-14213 -14396	-14414	-14432	-14451	-14469	-14487
1660.	-14323	-14341	-14359 -14542	-14378 -14560	-14578	-14596	-14614	-14633	-14651	-14669
1670.	-14505	-14524 -14705	-14723	-14741	-14760	-14778	-14796	-14814	-14832,	-14859
1680. 1690.	-14687 -14868	-14686	-14904	-14922	=14940	-14958	-14976	-14994	-15012	-15030
			•		•	-15138	VE156	-15174	-15191	-15209 -15368
1700.	-15048	-15066 -15245	-15084 -15263	-15102 -15281	-15150	-15317	-15156 -15334	-15352	-15370	-15348
1710.	-15406	-15423	-15441	-15459	-15477	-15494	-1.5512	-15530	-15548	-15565 -15742
1750.	-15583	-15601	-15619	-15636	-15654	-15672	-15689	-15707	-15725 -15901	-15918
1740.	-15760	-15777	-15795	-15613	-15830	-15848	-15865	-15883 -16058	-16076	-16093
1750.	-15936	-15953	-15971	-15988	-16006	-16023 -16198	-16041 -16215	-16233	-16250	-16868
1760.	-16111	-16128	-16146	-16163	-16180 -16354	-16372	-16389	-16406	- 52.50	+ 315434 m
1770.	-16285:	-16302	-;6320	-16337	-10224	0312	. 3307	-2400		

Table X

GEOPOTENTIAL ALTITUDE IN FEET AS A FUNCTION OF PRESSURE IN INCHES OF MERCURY

P, in Hg:	Q,Ó00	0.001	0.002	J.003	0.004	0.005	0.006	0.007	0.008	0.009
.250 .260 .270 .280 .290	104674 103846 133049 102281	104590 103765 102971 102206	104506 103685 102800 102131	104423 103604 102816 102056	104339 103524 102739 101982	104256 103444 102662 101907	105015 104174 103365 102585 101833	104929 104991 103285 102509 101760	104844 104009 103206 102433 101686	104759 103928 103128 102357 101613
300 310 320 330 340 350 350 370 380	101540 100824 100831 99460 98178 97565 96391 95827	1.01467 1.00753 1.00063 1.99394 98745 98145 97505 96911 96314 95772	101395 100683 99995 99328 98681 98054 97445 96853 96277	101322 100613 99927 999262 98618 97993 97385 96795 96220 95661	101250 100544 99860 99197 98555 97325 96737 96764 98606	101179 100474 99792 99132 98491 97870 97266 96679 95107	101107 100405 99725 99725 99067 98428 97808 97206 96621 96051	101036 100336 99659 99002 98367 97747 96565 95995	100965 100267 99592 98938 98303 97567 97508 96506 95939 95387	100894 100199 99526 98873 98246 97626 97626 97628 95883
400 410 4120 4130 4150 450 450 4470 4480 4490	95278 94743 94722 93713 937216 92730 92755 91791 91337 90893	95224 94691 93166 93166 92692 92769 91745 91292 90849	95170 94638 94119 93612 93117 92634 92162 91700 91246 90805	95116 94586 94068 93569 93569 92115 92115 91653 91203 90761	95063 94533 94017 93512 93020 92539 91608 91608 91758 90718	95009 94481 93483 93483 92471 92482 91563 91114 90674	94956 94429 93915 93413 92923 92444 91976 91070 90631	94902 94377 93363 92874 92874 91929 91472 91925 910587	94849 94325 93314 923326 92826 91827 91983 91427 90544	94796 94273 93763 93265 92778 92302 91337 91382 90937 90501
500 5100 5120 5130 5130 5130 5130 5130 5130 5130 513	90458 90031 89614 89204 88408 98021 87642 87269 87902	90415 89989 89572 89164 88169 88369 87983 87602 86866	90372 89947 89531 89123 88723 88330 87945 87567 87195 86830	90329 89905 89490 89083 88683 88291 87907 87529 87158 86794	90286 89863 89449 89044 88653 87869 87492 87121 86758	90243 89822 89828 89402 88604 88214 87831 87454 87454 86722	90201 89780 89367 88962 88565 88175 877477 87448 86686	90158 89738 89326 889322 88526 88137 87755 87358 87358 87012	90116 89697 89285 88882 88487 88098 87717 87343 86975 86614	90074 89655 89655 89845 88842 88447 88060 87679 87309 86578
600 610 620 630 640 650 660 660 660	86542 86188 85840 85498 85161 84830 84504 84183 83555	86507 86153 85806 85464 85428 84797 84471 84151 83835 83524	86471 86771 85771 85430 85430 85495 84764 84439 84119 83804 83493	86435 86083 85737 85396 85061 84731 84407 84087 83772 83462	86400 86048 85703 85363 85028 84699 84375 84056 83741 83432	86365 86014 85668 85329 84995 94666 84343 84024 83710 83401	86329 85979 85634 85295 84962 84634 84310 83992 83679 83370	86294 85944 85600 85262 84929 84601 84278 83961 83648 83340	86259 85909 85566 85228 84896 84569 84246 83929 83617 83309	86223 85875 85875 85195 84863 848214 8386 84214 83898 83586 83279
.700 .710 .720 .730 .740 .750 .760 .770 .780	83248 82946 82648 82354 821778 81497 81219 80674	83218 82916 82616 82335 82035 81750 81469 81191 80917 80647	83187 82886 82589 82596 82097 81722 81441 81164 80890 80620	83157 82856 82559 82567 87378 81694 81413 81136 80863 80593	83127 82826 82530 82237 91949 81065 81109 80836 80566	83096 82796 82500 82208 819317 816317 81081 8089 80540	83066 82766 82471 82480 81892 81699 81329 81329 81329 80782	83036 82737 82442 62151 81864 81581 81302 81026 80754 80486	83006 82707 82412 824122 81835 81553 81553 80999 80728 80460	82975 62677 82677 82093 818093 81825 81525 81525 80701 80433
.800 .810 .820 .830 .840 .850 .860 .870 .880	80406 80143 79882 79625 79371 79120 78872 78627 78365 78146	80380 80116 79856 79856 79346 79095 78847 78603 78361 78122	80353 80090 79831 79831 79321 79070 78823 78578 78337 78098	80327 80064 79805 79548 79295 79045 78798 78554 78313 78074	80301 80038 79779 79523 79520 79020 78774 78530 78289 78051	80274 80012 79123 79498 79245 78996 78749 78505 78027	80248 79986 79728 79472 79472 78971 78725 78482 78241 78003	80221 79960 79702 79447 79195 78946 78700 78457 78217 77980	80195 79934 79676 79422 79170 78921 78676 78433 78193 77956	80169 79908 79651 79396 79145 78197 78651 78651 78170 77933
.900 .910 .920 .930 .940 .950 .960 .980 .980	77909 77675 77444 77216 76989 76766 76554 76326 76409 75895	77886 77652 77421 77193 76967 76522 76304 76087 75873	77862 77629 77398 77170 76944 76721 76501 76582 76066 75852	77839 77606 77375 77147 76922 76699 76479 76260 76044 75831	77815 77583 77352 77:125 769:00 76677 76457 7623 75810	77792 77559 77559 77102 76877 76875 76435 76217 76002 75788	77769 77536 77307 77080 76855 76633 76413 76195 75980 75767	77745 777513 77284 77057 76833 76391 76391 761959 75959	77722 77490 77261 77034 76810 76589 76369 76152 75937 75725	77699 77467 77238 77012 76567 76567 76347 76131 75916 75704

TABLE X = Continued

P _{s.} in. Hg	0.000	0.001	0.002	0.003	0:004	0.005	0.006	Ó.007	0.008	0.009
1.000 1.010 1.020 1.030 1.040 1.050 1.060	75683 75473 75265 75059 74856 74654 74456 74256	75662 75452 75244 75039 74835 74634 74434 74434 74437	75640 75431 75224 75018 74815 74614 74414 74417	75619 75410 75409 754998 74594 74594 74197 74002	75598 75389 75189 75187 749775 745775 74178 74178 73983 73789	75577 75369 75169 74957 74954 74954 74955 74158 73963	75556 75348 75141 74937 74937 74534 74335 74139 7394 73951	75535 75327 75121 74916 	75515 75306 75106 75106 74896 74494 74496 74100 73905 75713	75494 75286 75080 74876 74674 74474 74476 74080 73886 73693
1.090 1.110 1.120 1.130 1.140 1.150 1.160	73674 73484 73295 73108 72923 72740 72558 72377 72199 72024	73647 73655 73465 73277 73090 72905 72721 72540 72359 72181 72004	73828 73636 73246 73271 73071 72886 72703 72521 72342 72163 711986	73809 73617 73827 73239 73868 72685 72503 72324 72145 71969	73598 73598 73220 73034 72850 72667 72485 72306 72128 731951	735770 73589 73202 73016 72831 72648 72288 72110 71933	73560 73371 73183 72997 72813 72630 72449 72270 72092 71916	73541 73352 73164 72979 72794 72612 72612 72431 72252 72072 71898	73522 73333 733146 72960 72776 72574 72413 72234 72057	73503 73314 73127 72942 72756 72576 72395 72216 72395 72216
1.2190 1.210 1.220 1.230 1.230 1.250 1.250 1.260 1.270 1.270	71846 71672 71672 71499 71328 71158 70990 70823 70657 70493	71828 716524 71652 713477 71147 70906 70640 71676 70313	71811 71637 71294 71124 70956 70789 70624 70460 70497	71 793 71 620 71 447 71 277 71 107 70939 70773 70607 70444 70281	71776 71602 71430 71260 710923 70756 70591 70427 70265	71759 71585 71413 71243 710906 70740 70575 70411 70249	71741 71568 71396 71226 71057 70889 70723 70558 70395 70232	71724 71551 71379 71209 71209 710872 70706 70572 70378 70216	71706 71533 71362 71192 71192 71023 70856 70690 70585 70362 70200	71689 71516 71345 71106 70839 70673 70509 70346 70184
1.300 1.310 1.320 1.330 1.340 1.350 1.360 1.370 1.380 1.390	70168 70007 69848 69690 69534 69378 69224 69070 68918 68768	70152 69832 69832 69675 69518 69363 69208 69055 68903 68753	701-36 69975 69817 69817 69659 69502 69347 69040 6888	70120 69959 69801 69643 69487 69332 69178 69025 68873 68722	70103 69944 69785 69627 69471 69316 69162 69010 688707	70087 69928 69769 69612 69456 69301 69147 68994 68693	70071 69912 69753 69596 69440 69285 69132 68979 68828 68678	70055 69896 69736 69580 69580 69270 69116 68813 68663	70039 69880 69722 69565 69409 69254 69101 68798 68648	70023 69864 69706 69549 69394 69239 69086 68934 68783 68633
1.400 1.410 1.420 1.430 1.430 1.450 1.460 1.470 1.480	68618 68469 68321 68175 63029 67885 67741 67599 67458 67317	68603 68454 68307 68160 68015 67871 67727 67585 67444 67303	68588 68439 68292 58146 68000 67856 67713 67571 67429	68573 68425 68427 68131 67986 67699 67657	68558 68410 68263 68117 67971 67827 67684 67542 67401	68543 68395 68248 68102 67957 67813 67670 675287 67247	68528 68380 68233 68087 67943 67799 67656 67514 67333	68514 68366 68219 68073 67928 67758 67642 67509 67359 67219	68499 68351 68204 68058 67914 677.70 67627 67486 67345 67206	68484 68336 68190 68049 67899 67756 67613 67472 67331 67192
1.500 1.510 1.520 1.530 1.550 1.550 1.550 1.570	67178 67039 66902 66765 66629 66494 66360 66227 66095 65964	67164 67025 66888 66751 66616 66481 66347 66214 66082 65951	67150 67012 66874 66738 66602 66467 66334 66201 66069 65938	67136 66998 66860 66724 66589 66454 66320 66188 66056 65924	67122 66984 66847 66710 66575 66441 66307 66174 65911	67108 66970 66833 66697 66562 66427 66294 66161 66029 65898	67094 66956 66819 66548 66548 66280 66148 66016	67081 66943 66806 66670 66535 66400 66267 66135 66003 65872	67067 66929 66792 666521 66521 66387 66254 66121 65990 65859	67053 66915 66779 66643 66508 66374 66241 66108 65977 65846
1.600 1.610 1.620 1.630 1.640 1.650 1.660 1.670	65833 65704 65575 65447 65319 65067 64942 64818 64695	65820 65691 65562 65434 65307 65180 65055 64930 64806 64682	65807 65678 655421 65294 651:68 65042 64917 6470	65794 65665 65536 655408 65281 65155 65030 64905 64781 64658	65781 65652 65523 65529 65143 65017 64893 64769 64645	65768 65639 65511 65383 65256 65130 65085 64880 64756 64633	65755 65626 65628 65370 65243 65173 64992 64868 64764	63742 65613 65485 65358 65231 65105 64985 64855 64732 64609	65690 65472 65345 65218 65092 64964 64719 64596	65716 65588 655332 65332 65206 65080 64980 64930 64707 64584
1 • 700 1 • 710 1 • 720 1 • 733 1 • 740 1 • 750 1 • 760 1 • 770 1 • 790	64572 64450 64329 64208 64988 63969 63850 63732 63615 63499	64560 64438 64316 64196 64076 63957 63838 63721 63603 63487	64547 64426 64304 64184 64064 63945 63827 63709 63592 63475	64535 64413 64292 64172 64052 63933 63815 63580 63464	64523 64401 64280 64160 64040 63921 63803 63685 63568 63452	64511 64389 64268 64148 64028 63909 63791 63674 63557	64499 64377 54256 64136 64016 63898 63779 63665 63545 63429	64486 64365 64244 64124 64004 63886 63765 63650 63533 63417	64474 64353 64232 64112 631974 63754 63758 63522 63406	64462 64341: 64220 64100 63981 63862 63744 63627 63510 63394
1 • 800 1 • 810 1 • 830 1 • 850 1 • 850 1 • 860	63383 63267 63153 63153 62925 62813 62700 62589 62478	63371 63256 63141 63027 62914 62801 62689 62578 62578	63360 63244 63136 63016 62903 6278 62567 62456	63348 63233 63118 63005 6289 62779 62667 62555 62445	63336 63221 63107 62880 62880 62768 62656 6254 62434 62324	633210 633210 630982 629869 62756 626433 626433 62313	63313 63199 63971 62858 62745 62633 62522 62412	63302 63187 63073 62959 62846 62734 62621 62511 62401 62291	63290 63176 63076 62948 62835 62723 62610 62390 62280	63279 63164 63050 62937 62824 62712 62600 62489 62379 62269
1.900 1.920 1.920 1.930 1.940 1.950 1.960 1.970 1.980	62258 62148 62040 61932 61824 61717 61511 61505 61400	62247 62138 62029 61921 61814 61707 61600 61494 61389 61284	62236 62127 62018 61910 61803 61696 61594 61379 61274	62225	62214 62105 61997 61889 61781 61675 61568 61463 61358 61253	62203 62094 61986 61878 61771 61656 61558 61452 61347 61243	62,192 62083 61975 61867 61760 61653 61547 61442 61337	62181 62072 51964 61856 61749 61643 61537 61431 61326	62170 62062 61953 61846 61739 61632 61526 61421 61316	62159 62051 61943 61835 61728 61621 51516 61410 61305

668502 O - 63 - 19.

TABLE X - Continued:

		.•	•				•	1 1			
	P, in Hg	0.000	0:00±	0,002	0.003	- 0:004	0,005	0.006	0.007	0.008	0.009
	2.000 2.010 2.020 2.030 2.030 2.050 2.050 2.050 2.050 2.050	61087 60983 60881 60877 60677 60677 60576 60374 60275	61180 61076 60973 60871 60768 60667 60565 60465 60364 60265	61170 61066 60963 60963 60758 60656 60656 60455 60455	61159 61056 60953 60850 60748 60646 60545 60345 60345	61149 61045 60940 60738 60636 60635 60435 60435 60235	61139 61035 60932 60830 60728 60626 60425 60425 60325	61128 61025 60922 60929 60717 60616 60415 60415 60315	61118 61014 60912 60809 60707 60506 60505 60405 60305 60205	61107 61004 60799 60799 60597 60596 60395 60395 60195	61097 60994 60991 60789 60587 60585 60385 60285
~	2.110 2.110 2.120 2.120 2.150 2.150 2.160 2.170 2.180 2.190	60175 60077 59978 59980 59783 59686 59589 59493 59493 59498	60165 60067 59968 59871 59773 59676 59580 59484 59388 59293	60156 60057 59959 59763 59766 59574 59378	60146 60047 59981 59754 59657 59560 59369 59274	60136 600379 59934 59844 59647 59551 59359 59364	60126 60027 59831 59731 59737 59541 59355	60116 60017 59622 59725 59628 59532 59532 59340 59245	59236	59900 59802 59609 59609 59512 59417 59321 59226	60086 59988 59889 59793 59696 59593 59407 59312 59217
	200 2010 2010 2010 2010 2010 2010 2010	59208 59113 59019 58923 58740 58648 58556 58464 58373	59196 59104 59010 58916 58923 58731 58638 58545 58455 58364	59189 59094 59000 58907 58814 58721 58629	59179 59085 58898 588712 58712 58528 58437 58346	591.70. 590.76 58982 58888 58795 58703 58611 58619 58428 58337	59160 59066 58972 58879 58694 58602 58510 58419 58328	59151 59053 58870 58777 58685 58593 58591 58410 58319	59141 59054 58954 58861 58675 58585 58401 58310	59132 59038 589038 58851 58758 58666 58574 58483 58391	59123 59029 58935 58842 58749 58657 58565 58473 58382 58292
	2.300 2.310 2.320 2.330 2.340 2.350 2.360 2.360 2.380 2.380	58283 58192 56103 58013 57924 57835 57747 57659 57571 57484	58274 58183 58094 58094 57915 57826 57738 57650 57650 57475	58265 58174 58085 57995 57906 57818 57729 57641 57554 57467	58256 58165 58076 57987 57897 57809 57720 57633 57545 57458	58247 58156 58067 57877 57888 57800 57712 57624 57536 57449	58237 58147 58058 57968 57880 57703 5776128 57441	58228 58138 58049 57960 57871 57782 57694 57696 57519 57432	58129 58129 58040 57951 57862 57773 57685 57590 57423	58210 58120 58120 587042: 57853 57764 577589 57501 57415	58201 58111 58022 57933 57844 57756 57668 57580 57493 57406
	2.400 2.410 2.420 2.430 2.450 2.450 2.450 2.450 2.450 2.450	57397 57311 57225 57139 57053 56968 56883 56799 56791 56631	57388 57302 57216 57130 57045 56960 56875 56791 56707 56623	57380 57293 57207 57122 57036 56951 56867 56698 56698	57371 57285 57285 57199 57113 57028 56943 56858 56774 56690 56606	57363 57276 57190 57190 57019 56934 56850 56765 56681 56598	57354 57268 57182 57096 57091 56926 56841 56757 56673 56589	57345 57259 57173 57082 57002 56917 56833 56749 56665 56581	57337 57250 57164 57079 56999 56824 56740 58656 56573	57328 57242 57156 57070 56985 56900 56816 56732 56648 56564	57319 57233 57147 57062 56977 56892 56807 56723 56640 56556
	2000 2000 2000 2000 2000 2000 2000 200	56548 56465 56382 56300 56136 56054 55973 55892 55812	5053741 5063299 5662299 5661246 559884 559884	56531 56448 56366 56283 56201 56120 56038 55876 55876	56523 56440 56357 562275 56193 56111 56030 55949 55868 55788	56515 564329 563497 56185 56103 560221 55860 55780	56506 56423 564259 56259 56177 56014 55953 55772	56498 56415 56333 56168 56168 56087 550925 55844 55764	56490 56407 56424 56242 56169 55999 555936 55756	56481 56399 56234 56234 56152 56071 55989 55989 55928 55748	56473 56390 56226 56144 56081 55981 55901 55820 55740
	2.600 0.610 0.620 0.640 0.650 0.660 0.600 0.600 0.600 0.600 0.600 0.600 0.600 0.600 0.600 0.600	55732 55732 55572 554914 55335 55257 55179 55101	55724 55644 555486 55486 55349 553249 55171 555016	55716 55636 55557 55477 55398 55390 55241 55163 55086 5508	55708 55628 55549 55469 55391 55312 55134 55156 55078 55001	55700 55640 55541 55383 55304 55226 55148 55070 54993	9223 9123 9555555 55555521 55555521 55555555555 55555555	55684 555604 55546 553467 55288 552132 552132 55077	55676 55517 555438 553289 55202 55122 55147 54970	55668 55589 555430 5554351 553273 5511179 551139 5512962	55660 55580 55501 55422 53343 55265 55187 55109 55032 54954
	2.700 2.710 2.720 2.730 2.740 2.750 2.760 2.770 2.770 2.790	54947 54870 54793 54717 546565 54489 54414 54339	54939 54982 54785 547633 54557 54482 54492 54437 544257	544931 544778 547701 5445574 5543574 554399 544399 54249	54923 54847 54670 54694 54612 54542 54467 544397 54312	549.16 549.39 54762 54680 54535 54535 544369 54389 54235	54908 54831 54679 546027 546027 544522 54377 543027	54900 548247 5447471 5545919 554369 554369 554369 54369	54893 548140 54740 54663 54512 544362 544362 544367 544287	5485 548032 547550 54450 54504 54454 5442 5442 543275	54877 54801 54724 54649 54572 54497 54497 54277 54277
i	2.800 2.810 2.830 2.830 2.850 2.860 2.870 2.870	54190 54116 54042 53968 53892 53749 53674 53653	54183 54108 54034 53961 53884 53742 53669 53525	54101 54027 53954 53960 53807 53754 53662 53517	54168 54094 54020 533973 538007 537634 53582 53510	541 60 540 86 540 12 539 39 537 93 537 20 537 20 535 25 535 03	54153 54075 53931 53935 53718 53718 535408 53490	54145 54071 539924 53851 53778 53778 53633 53561 53489	54138 54064 53990 53917 538471 53628 53628 53553 53481	54131 54057 53983 53909 53836 53763 53618 53546 53474	54123 54049 53976 53902 53829 53756 5368 53681 - 52539 53467
	2.900 2.910 2.930 2.930 2.950 2.950 2.960 2.980	53460 53388 53317 53246 53175 53104 532564 532564 52824	53453 53381 53319 53219 53168 53097 53027 52957 52817	53445 53374 53303 53232 53161 53090 530950 522880 52810	53438 53367 53294 53154 53083 53083 53083 52873 52873 52803	53431 53360 53288 53217 53147 53076 53076 53076 52736 52866 52796	53424 53352 53261 53261 532139 53069 52929 52929 52859 52789	53417 53345 53274 53274 53132 53132 53132 532922 52922 52922 52782	53410 533367 53196 53126 53055 52985 52985 52845 52775	53403 53331 53240 53189 53188 53048 52978 52978 52908 52838 52768	53395 53324 53253182 53182 53111 53041 52971 52971 52831 52761

TABLE X - Continued

GEOPOTENTIAL ALTITUDE IN FEET as a function of PRESSURE IN INCHES OF MERCURY

0 i- U-	0.00		0:02	ò o ii	0.04 \	0,05	0.06	0.07	0.08	0.09
P, in. Hg:	0.00	0.01		0.03	0.04	*5	2		52207	52139
3.00 3.10 3.20 3.30	52754 52072 51412 50771	52685 52005 51347 50709	52616 51938 51282 50646	52547 51872 51218 50583	'K 1 2 A 4	5241:1 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	52342 51673 51025 50397	52275 51608 50961 50335	51542 50898 50273	51477 50835 50212
3.50	50150 49547	50089 49488 48903	50028 49429 45845	49968 49370 48788	49907' © 49311 48731	49847 49252 48674	49786 49194 48617	49726 49135 48560	49666 49077 48504	49607 49019 48447 47891
3.70	48391 47836 47296	48335 47782 47242	48279 47727 47189	48223 47673 47136	48167 47618 47083	48112 47564 47031	48056 47510 46978	48001 47456 46926	47946 47403 46873	47349 46821
4.00	46769 46255 45754	46717 46205 45704	46665 46154 45655	46614 46104 45606	46562 46053 45557	4651-1 45003 45508	46459 45953 45459	46408 45903 45410 44928	46357 45853 45361	46306 45803 45313 44833 44365
4.20 4.30 4.40 4.50	45264 44786 44318	45216 44.739 44.272	45166 44692	45120 44645 44180 43726	44598	45508 45024 44551 44089	44976 44504 44043	43997	43952	43906
4.70 4.70	43651 43414 42976	43369 42932	44226 43771 43325 42889	43261 42846	43681 43237 42803 42378	43636 43194 42760 42335	43592 43150 42717 42293	43547 43106 42674 42252	43502 43063 42632 42210	43458 43019 42589 42168
4.90 5.00	42547 42126 41714	42504 42085 41674	42462 42043 41633	42420 42002 41592	41961	41919	41878 41471	41837 41431	4173	41.755. 41.350
5.20	A 1 3 1 0	41270 40875 40487	40836 40448	40797 40410	40758 40758	40719 40333	41072 40680 40295 39918	41032 40641 40257	40602 40602 40219	40953 40564 4018! 39806
5.50 5.60 5.70	40143 39768 39400	40106 39731 39364	40068 3 9694 3 932 7	40030 39657 39291	39993 39620 39255	39955 39583 39218 38860	39918 39547 39182 38824	39880 3951:0 39146 38789	39843 39473 39110 38753	39437 39074 38718
5.80	39038 38683	39002 3864.7	38967 38612	38931 38577	38895 38542	38507	38472	38437	38402	38368 38023
6.00 6.10 6.20	38333 37989 37651 37318	38298 37955 37617 37285	38264 37921 37584 37252	38229 37887 37550 37219	38195 37853 37517 37186	38160 37819 37484 37153	38126 37785 37450 37121	38092 37752 37417 37088	38057 37718 37384 37055	37684 37351 37023
6.40 6.50 6.60	36990 36668 36350	36958 36636 36318	3694 36604 36287	36893 36572 36256	35861 36540 36224	36828 36508 36193	36796 36476 36162	36764 36445 36130 35821	36732 36413 36099 35790	36700 36382 36068 35759
6.70 6.80 6.90	36037 35728 35423	36006 35698 35393	35975 35667 35363	35944 35636 35332	35913 35606 35302	35882 35575 35272	35851 35545 35242	35514 35212	35484 35182	35453 35152
7.00 7.10 7.20	35122 34823 34529	35092 34794 34499	35062 34764 34470	35032 34735 34441	35002 34705 34412	34972 34676 34382	34942: 34646 34353	34912 34617 34324	34863 34587 34295	34853 34558 34266
7.40 7.50	34237 33949 33664	34208 33920 33635	34179 33892 33607	34150 33863 33579	34121 33834 33551 ()	34093 33806 33 52 2	34064 33777 33494	34035 33749 33466	34006 33721 33438 33158	33978 33692 33410 33130
7.60 7.70 7.80	33 38 2 33103 3 282 7	33354 33075 32799	33326 33047 32772 32499	33298 33020 32744 32472	33270 32992 32717 32445	33242 32964 32690 32418	33214 32937 32662 32391	33186 32909 32635 32364	32882 32608 32337	32854 32580 32310
7.90 8.00 8.10	32553 32283 32015	32526 32256 31988	32229 31962	32202 31935	32175 31909	32149 31882	32122 31 85 6	32095 31 8 29	32068 31803	32042 31776
8.20 8.30 8.40	31750 31487 31227	31724 31461 31202	31697 31435 31176	31671 31409 31150	31645 31383 31124	31618 31357 31098	31592 31331 31073	31566 31305 31047 30791	31540 31279 31021 30766	31514 31253 30996 30740
8.50 8.60 8.70	30970 30715 30462	30944 30690 30437	30919 30664 30412	30893 30639 30387	30868 30614 30362 30113	30842 30588 30337 30088	30817 30 563 30312 30063	30538 30287 30038	30513 30262 30013	30487 30237 29989
8.80	30212 29964	30187 29939	30162 29915	30137 29890 29645	29865	29841	29816	29792 29306	29767 29523 29281	29743 29499
9.00 9.10 9.20 9.30	29718 29475 29233 28994	29694 29450 29269 28970	29669 29426 29185 28946	29402 29161 28923	29621 29378 29137 28899	28675	29330 29330 29090 28851	29066 28828	29281 29042 28804 28569	29257 29018 28780 28545
9.50 9.50	28522 28522 28289	28733 28498 28265	28710 28475 28242	28686 28452 28219	28663 28428 28196	28639 28405 28173	28616 28382 28150 27919	28592 28358 28126 27897	28335 28103 27874	28312 28080 27851
9.70 9.80 9.90	28057 27828 27601	28034 27805 27578	29011 27782 27555	27988 27760 27533	27965 27737 27510	27942 27714 27488	27691 27465	27897 27669 27443	27646 27420	27623 27398
10.00 10.10 10.20	27375 27151 26929	27353 27129 26907	27330 27107 26885	27308 27085 26863	27285 27062 26841	27263 27040 26819	27241 27018 26797	27218 26996 26775	27196 26974 26753 26534	27174 26951 26731 26512
10.30 10.40 10.50	26709 26491 26274	26687 26469 26252	26665 26447 26231	26643 26425 26209	26622 26404 26188 25973	26600 26382 26166 25952	26578 26360 26145 25931	26556 26339 26123 25909	26317 26102 25888	26296 26080 25867
10.60 10.70 10.80	26059 25845 25633	26037 25824 25612 25402	26016 25803 25591 25381	25995 25782 25570 25360	25760 25549 25340	25739 25528 25319	25718 25507 25298	25697 25486 25277	25676 25465 25256	25655 25444 25235
10.90	25423 25214 25007	25194 24987	25173 24966	25152 24945	25131 24925	25111 24904	25090 24884 24679	25069 24863 24659	25049 24843 24638	25028 24822 24618
11.30	24802 24597 24395	24761 24577 24374	24761 24557 24354	24740 24536 24334 24133	24720 24516 24314 24113	24699 24496 24294 24093	24476	24455 24254 24053	24435 24233: 24033	24415 24213 24013
11.60	24193- 23993 23795 23598-	24173 23974 23775 23578	24153 23954 23755 23559	23934 23736 23539	23914 23716 23519	23894 23696 23500	24073 23674 23676 23480	23854 23657 23461	23835 23637 23441	23815 23617 23422
11.80 11.90 12.00	23402 23208	23382 23188	23363 23169 22976	23344 23149 22957	23324 23130 22937	23305 23111 22918	23285	23 266 23072 22880	23246 23053 22361	23227 23034 22842
12.10 12.20 12.30	23014 22823 22632	22995 22803 22613	22976 22784 22594 22405	22957 22765 22575 22386	22937 22746 22556 22367	22727 22727 22537 22348	22899 22708 2251.8 22330	22689 22499 22311	22670 22480 22292	22651 22461 22273
12.50	22443 22254 22068	22424 22236 22049	22405 22217 22030 21845	22386 22198 22012 21826	22180 21993 21808	22161 21975 21789	22142 21956 21771	22124 21937 21753	22105 21919 21734	22086 21900 21716
12.70 12.80 12.90	21882 21697 21514	21663 21679 21496	21461 21477	21459	21624 21441	21606 21423	21587 21405	21569 21386	21551 21368	21532 21350

TABLE X - Continued

P, in. Hg:	0 00	0.01	C _{0.02}	0.03	0.04	0.05	0,06	0.07	0.08	Ö:09
13.00 13.10 13.20 13.30 13.40 13.50 13.50 13.70 13.80 13.90	21332 21351 20971 20971 20614 20437 20262 20087 19914 19741	21314 21133 20953 20774 20596 20420 20244 20970 19896 19724	21295 21115 20935 20756 20579 20402 20227 20227 29879 19707	21 4 77 21 09 7 20 9 1 7 20 9 1 7 20 7 3 8 20 7 3 8 20 2 9 20 2 9 20 2 9 20 8 9 20 8 9 20 8 9 20 8 9	21259 21079 20899 20721 20543 20367 20198 19844 19672	21 241 21 061 20 881 20 703 20 726 20 349 20 174 20 000 19827	21223 21043 20863 20685 20508 20332 20157 1983 1983	21 205 21 025 20 845 20 845 20 647 20 490 20 314 20 139 19 965 19 793 19 621	21187 21007 20828 20650 20473 20297 20122 19948 19775 19604	21169 20989 20832 20835 20455 20275 19938 199587
14.40 14.40 14.50 14.60 14.60 14.70 14.80 14.90	19399 19393 18893 18726 18560 18395	19382 19382 19212 19044 18876 18770 18549 18379 18215 18052	19535 19365 19365 19027 188693 18527 18363 18199 18036	19518 19348 19179 19010 18843 18676 18511 18346 18182 18020	19501 19331 19162 18162 18826 18660 18494 18330 18166 18003	19484 19314 19145 181977 18809 18643 18478 18313 18150 17987	19467 19297 19128 18960 18793 18627 18461 18297 18134	19450 19280 19111 18943 18776 18610 18445 18281 18117	19433 19263 19926 18926 18759 18593 18428 18264 18101	19416 19246 19246 19970 189743 185743 185742 18248 18085 17922
15.00 15.10 15.20 15.30 15.40 15.50 15.60 15.70 15.80 15.90	17906 17945 17584 17425 17266 17108 16995 16639 16484	17890 17729 17568 17409 17250 17092 16935 16779 16624 16469	17874 17713 17752 17393 17234 17077 16920 16763 16608	17858. 17697 17536 17377 17219 17061 16904 16748 16593 16438	17842 17681 17520 17561 17203 17045 1688 16732 16577 16423	17825 17665 17504 175345 17187 17029 16873 16717 16562 16407	17809 17648 17489 17329 17171 17014 16557 16701 16546 16392	17793 17632 17473 17314 17155 16998 16841 16686 16531	17777 17616 17616 17298 17140 16982 16826 16670 16515 16361	17761 17600 17441 17282 17124 16967 16810 16655 16500 16346
16:00 16:10 16:20 16:30 16:40 16:50 16:60 16:70 16:80 16:90	16331 16177 16025 15873 15722 15572 15423 15274 15126 14979	16315 16162 16010 15858 15707 15557 15408 15259 15112 14964	16300 16147 15995 15843 15692 15393 15245 15097 14950	16284 16132 15979 15828 15677 15577 15378 15282 14935	16269 16116 15964 15962 15513 15563 15513 15215 15067 14920	16254 16101 15949 15798 15747 15498 15349 15200 15053 14906	16239 16086 159783 15632 15483 15934 15185 15038 14891	16223 160719 15919 15768 15617 15468 15319 15171 15023	16208 16055 15753 15753 15602 15453 15304 15156 15009 14862	16193 16040 15888 15738 15587 15438 15289 15141 14994 14847
17.00 17.10 17.20 17.20 17.30 17.40 17.50 17.60 17.70 17.80 17.90	14833 14687 14542 14397 14253 14110 13968 13685 13685	14818 14672 14527 14383 14239 14096 13954 13812 13671 13530	14803 14658 14513 14368 14225 14082 13939 13798 13657 13516	14789 14643 14498 1435± 14210 14067 13925 13784 13643 13502	14774 14629 14484 14496 14196 14053 13911 13769 13629 13488	14760; 14614 14469 14469 14325 14182 14039 13897 13755 13615 13474	14745 14600 14455 14311 14167 14025 13883 13741 13600 13460	14730 14585 14440 14296 14153 14011 13869 13727 13586 13446	14716 14571 14426 14282 14139 13996 13854 13713 13572 13432	14701 14556 14412 14268 14125 13982 13699 13558 13418
18-00 18-10 18-20 18-30 18-40 18-50 18-60 18-70 18-80 18-90	13404 13265 13127 12989 12851 12714 12578 12433 12308	13391 13251 13113 12975 12837 12701 12565 12429 12294 12160	13377 13237 13299 12961 12824 12687 12551 12415 12281	13363 13224 13085 12947 12810 12673 12537 12402 12267 12133	1 3349 1 3210 1 3071 1 2934 1 2796 1 2660 1 2524 1 2388 1 2254 1 2119	13335 13196 13058 12920 12783 12646 12510 12375 12240 12106	13321 13182 13044 12906 12769 12633 12497 12361 12227 12093	13307 13168 131630 12892 12755 12619 12483 12243 12279	13293 13154 13154 12879 12742 12605 12470 12334 12200 12066	13279 13140 13002 12865 12728 12592 12456 12321 12186 12053
19.00 19.10 19.30 19.30 19.50 19.50 19.60 19.70 19.80 19.90	12039 11906 11773 11641 11375 11375 11248 11118 10985 10859	12026 11893 11760 11628 11496 11365 11235 11105 10975	12012 11879 11747 11615 11483 11352 11222 110962 10834	11999 11860 11733 11601 11470 11339 11209 11079 10950 10821	11986 11853 11720 14588 11457 11326 11196 11066 10937 10808	11972 11839 11707 1575 11444 11313 11183 11053 10924 10795	11959 11826 11694 12562 11431 11300 11170 121040 10911 10782	11 946 11 813 11 681 11 549 11 418 11 287 11 157 11 027 10 898	11935 11800 11667 11536 11404 11274 11144 11014 10885	11919 11-786 11654 11652 11391 11261 11131 11001 10872 10744
20.00 20.10 20.20 20.30 20.40 20.50 20.60 20.70 20.80 20.90	10731 10603 10476 10349 10222 10097 9971 9846 9722 9598	10718 10590 10463 10336 10210 10084 9959 9834 9709 9586	10705 10578 10450 10450 10323 10197 10946 9946 99573	10692 10565 10438 10311 10185 10059 9934 9809 9685 9561	10680 10552 10425 10425 10172 10046 9921 9796 9672 9549	10667 10539 10412 10286 10159 10034 9909 9784 9660 9536	10654 10527 10399 10273 10147 10021 9896 9772 9648 9524	10641 10514 10387 10260 10134 10009 9884 9759 9635 9512	10629 10501 10374 10248 10122 9996 9871 9747 9623 9499	10616 10488 10361 10235 10109 9984 9859 9734 9610 9487
21.00 21.10 21.20 21.30 21.30 21.50 21.60 21.70 21.80 21.90	9475 9352 9229 9107 8986 8864 8744 8504 8385	9462 9339 9217 9095 8973 8852 8732 8612 8492 8373	9450 9327 9327 9083 8961 88720 8600 8480 8361	9438 9315 9192 9071 8949 8828 8708 8588 8468 8349	9425 9303 9180 9058 8937 8816 8696 8576 8456 8337	9413 9290 9146 8925 8804 8684 8564 8444	9401 9278 9156 9034 8913 8792 8552 8432 8313	9388 9266 9144 9022 8980 8660 8640 8420 8301	9376 9254 9131 9010 8889 8768 8648 8528 8408 8290	9364 9241 9119 8998 8877 8756 8636 8516 8397 8278
22.00 22.10 22.20 22.30 22.40 22.40 22.50 22.70 22.60 22.70	0266 8147 8029 7912 7795 7678 7562, 7446 7330 7215	8254 8136 8018 7900 7783 7666 7550 7434 7319 7204	8242 8124 8006 7888 7771 7655 7538 7423 7307	8230 8112 7994 7877 7760 7643 7527 7413 7296 7181	8218 8100 7985 7865 7748 7631 7515 7400 7284 7169	820.7 8088 7979 7853 7736 7620 7504 7388 7273 7158	8195 5077 7959 7841 7725 7608 7492 -7377 7261 7146	8183 6065 7945 7830 7713 7597 7481 7365 7135	8171 30553 7935 7818 7701 7585 7469 7353 7253 7124	8159 2043 7924 7896 7690 7573 7457 7342 7327

GEOPOTENTIAL ALTITUDE IN FEET as a function of PRESSURE IN INCHES OF METERINE

							. 0		*	
P; in. Hg:	0.Ô0	0.01	0.02	0.03	0.04	0.05	0.06	0:07	0.08	. '9ق.ر _ي
23.00 23.10 23.20 23.30 23.40 23.50 23.50 23.50 23.50 23.50	7101 6986 6873 6759 6646 6533 .6421 6309 6198 6087	7089 6975 6961 6748 6635 6522 6410 6217 6076	7078 6964 6830 6737 6624 6511 6399 6276 6064	7066 6952 6839 6725 6612 6500 6388 6276 6164 6053	7055 6941 6827 6714 6601 6488 6376 6265 6153	7044 6929 6816 6703 6590 6477 6365 6253 6142 6031	7032 6918 6804 6578 6466 6354 6242 6131 6020	7021 6907 6907 6627 6557 6455 6343 6231 6120 6009	7009 67849 65849 6444 6330 6109 598	6798 3884 6757 6557 6432 6320 6209 6098 5987
24.00 24.10 24.20 24.20 24.50 24.60 24.60 24.60 24.60 24.60	5976 5866 57646 5537 5428 5319 5211 5103	59655 58555 57636 55627 55817 55300 55300 50985	5954 5844 55615 5515 5406 55186 52188 4974	5943 5832 5723 5613 5504 5395 5179 5179 5071	5932 5821 5712 5602 54384 5276 5160 4953	5921 58101 5591 55982 5375 5157 5149 4942	5910 5799 5580 5471 5364 5146 5039	5899 5788 5679 5569 5460 5352 5263 53755 4921 4814 4814	5888 5777 5668 5558 5649 5230 5125 501	56 7 57657 5657 5548 0930 032260 51240 9005
25.00 25.20 25.30 25.50 25.50 25.70 25.70 25.70	4888 4782 4675 4569 4463 4358 4253 4148 4044 3939	4878 4771 46659 4553 4347 4242 4138 4033 3929	4867 47604 4548 44437 4232 4122 41223 3919	4856 4750 4643 4532 4326 4221 4117 4012 3908	4846 4733 4527 4421 4316 4211 4102 3898	4835 4728 4516 4411 4305 4096 3992 3888	4824 4712 45106 4295 41985 41981 3981	4814 4707 4601 4495 4390 4284 4179 4075 3971 3867	4696 4596 44884 4379 4274 4169 4064 3956	4580 4580 4368 4263 4159 4054 3950 3846
26.00 26.10 26.20 26.30 26.40 26.50 26.60 26.60 26.60	3836 3732 3629 3526 3424 3322 3220 3118 3017 2916	3825 3722 3619 3516 3311 3210 3108 3007 2906	3815 3712 3609 3506 3403 3499 3098 2997 2896	3805 3701 3598 3495 3393 3291 3189 3088 2987 2886	3794 3691 3588 3485 3383 3281 3179 3078 2976 2876	3784 3681 3578 3475 3373 3271 3169 3067 2966 2866	3774 35767 3565 33665 33660 3159 3056 2855	3763 3557 3454 3352 3250 3147 2946 2845	3753 3654 3544 3344 3342 3240 3138 3037 2936 2835	3743 3639 3537 3434 3332 3232 3128 3127 2926
27.00 27.10 27.20 27.30 27.40 27.50 27.60 27.70 27.80 27.80	2815 2715 2615 2515 2516 2316 2218 2119 2021	2805 2705 2605 2505 2506 2307 2208 2109 2011 1913	2795 2695 2595 2496 2297 2198 2099 2001	2785 2685 2585 2485 2386 2287 2188 2089 1991 1893	2775 2675 2675 2475 2376 2376 2178 2080 1981 1884	2765 2665 2565 2465 2366 2267 2168 2070 1972 1874	2755 2655 2555 2455 2456 2257 2158 2060 1962 1864	2745 2645 2545 2445 2346 2347 2149 2199 1992 1854	2735 2635 2535 2435 2435 2336 2237 2139 2040 1942 1844	2725 2625 2525 2426 2326 2227 2129 2030 1932 1835
28.10 28.10 28.30 28.30 28.30 28.50 28.60 28.60 28.60 28.60 28.60 28.60	1825 1727 1630 1533 1437 1340 1244 1149 1053 958	1815 1718 1621 1524 1427 1331 1235 1139 1044	1805 1708 1611 1514 1417 1321 1225 1129 1034 939	1796 1698 1601 1504 1408 1312 1216 1120 1024 929	1786 1689 1592 1495 1378 1302 1206 1110 1015	1776 1679 1582 1485 1389 1292 1196 1101 1005	1766- 1669 1572 1475- 1379 1283 1187- 1091 996- 901	1757 1659 1562 1466 1369 1273 1177 1082 986 891	1747 1650 1553 1456 1360 1264 11072 977 882	1737 1640 1543 1446 1350 1254 1158 1063 967 872
29.00 29.10 29.20 29.30 29.40 29.40 29.60 29.70 29.80 29.90	863 768 674 579 486 392 298 205 112	853 759 664 570 476 382 289 196 103	844 749 655 561 467 373 280 187 94	834 740 645 551 457 364 270 177 84	825 730 636 542 448 354 261 168 75 -17	815 721 627 532 439 345 259 1569 -27	806 711 617 523 429 336 242 149 57	796 7008 514 4226 233 147 -45	787 693 598 504 411 317 224 131 38 -54	778 683 589 495 401 308 2122 122 -64
30.00 30.10 30.20 30.30 30.40 30.50 30.60 30.70 30.80 30.90	-73 -165 -257 -348 -440 -531 -622 -713 -803 -893	-82 -174 -266 -358 -449 -540 -631 -722 -812 -902	-91 -183 -275 -367 -458 -549 -640 -731 -911	-100 -193 -284 -376 -467 -558 -649 -740 -830 -920	-110 -202 -294 -385 -476 -558 -658 -7439 -839	-119 -211 -303 -394 -486 -577 -667 -758 -848 -938	~128 -220 -312 -403 -495 -586 -676 -767 -857 -947	-137 -221 -413 -595 -686 -766 -956	-147 -238 -330 -422 -513 -695 -785 -875 -965	-156 -248 -339 -431 -522 -613 -704 -794 -884 -974
31.00 31.20 31.30 31.50 31.50 31.70 31.70	-983 -1073 -1163 -1252 -1341 -1430 -1518 -1695 -1783	-992 -1082 -1172 -1261 -1350 -1439 -1527 -1616 -1704 -1792	-1001 -1091 -1181 -1270 -1359 -1448 -1536 -1624 -1713 -1800	-1010 -1:100 -1189 -1279 -1368 -1456 -1545 -1633 -1721 -1809	-1019 -1109 -1198 -1288 -1377 -1465 -1554 -1542 -1730 -1818	-1028 -1118 -1207 -1297 -1385 -1474 -1561 -1739 -1627	-1037 -11/27 -1216 -1305 -1394 -1483 -1571 -1660 -1748 -1836	-1046 -1125 -1325 -1314 -1492 -1580 -1669 -1757 -1844	-1412 -1501 -1589 -1677 -1765 -1853	-1064 -1154 -1243 -1232 -1421 -1598 -1598 -1774 -1862
32.10 32.10 32.20 32.30 32.50 32.50 32.50 32.70 32.70	-1871 -1958 -2045 -2132 -2139 -2396 -2396 -2396 -2564 -2650	-1879 -1967 -2054 -2141 -2228 -2314 -24087 -2573 -2659	-1888 -1976 -2063 -21537 -23239 -24496 -2567	-1897 -1984 -2071 -2158 -2245 -2332 -2418 -2504 -2590 -2676	~1906 ~1993 ~2080 ~22564 ~2254 ~2340 ~2423 ~2599 ~2684	-1914 -2008 -2089 -2176 -2253 -2349 -24527 -26093	-1923 -2010 -2099 -2184 -2271 -2358 -2450 -2616	-1936 -2193 -2193 -2286 -2366 -2453 -2524 -2710	-1941 -2028 -2115 -2202 -2288 -2375 -2461 -2547 -2633 -2719	-1949 -2037 -2124 -1227 -2384 -2470 -2556 -2641 -2727

TABLE X - Concluded

P, in. Hg	0.00	0.04 0.02	0,03	0.04	0.05	0.06	0.1
33.00 33.10 33.20 33.20 33.20 33.20 33.20 33.20 33.60 33.60 33.80 33.90	-2736 -2821 -2906 -2991 -3076 -3160 -3244 -3329 -3412 -3496	12744	~276.1 ~1646 ~2932 ~30101 ~3185 ~2764 ~3438 ~3521	26840 -31940 -31978 -31978 -33466 -3530	-2778 -2864 -2949 -3033 -3118 -3202 -3287 -3371 -3538	#2707 -2872 -2957 -3042 -3126 -3211 -3295 -3379 -3546	*255 *255 *255 *315 *315 *315 *315 *315 *315 *315 *3
34.00 34.20 34.20 34.30 34.50 34.60 34.60 34.60 34.60 34.60	-3580 -3663 -3746 -3829 -3912 -3994 -4076 -4159 -4240 -4322	3888 - 3596 3671 - 3680 33734 - 3763 3837 - 3845 3920 - 3928 4002 - 4011 4005 - 4093 4167 - 4175 4249 - 4257 4339	-3605 -3688 -3771 -3854 -3936 -4019 -4183 -4265 -4347	-3613 -3696 -379 -3845 -3945 -4109 -4127 -41275	-3621 -3704 -3787 -3870 -3953 -4035 -4118 -4200 -4281 -4363	-3630 -3713 -3776 -3879 -3961 -4064 -4426 -4208 -4208 -4371	13638 13721 13887 13887 14932

P, in Hg	0.0	1.0	OVŽ	0.3	0.4	0.5	.076	***
35.0 36.0 37.0 38.0 40.0 41.0 42.0 43.0	-4404 -5209 -5996 -67621 -8260 -2983 -9693 -10382	485 -5280 -6074 -6	-2566 -5358 -5152 -6949 -7676 -78405 -9833 -10527		-5207 -5207 -7073 -58269 -59964 -10964 -1198	-4809 -5605 -6384 -7892 -7892 -86340 -10043 -10738 -11409	-536 -5461 -7221 -7964 -94112 -10800 -1,476	A STATE OF THE STA
45.0 46.0 47.0 45.0 47.0 50.0 51.0 52.0	-11743 -12402 -13049 -13685 -14310 -14926 -15531 -16127	-11809 -12467 -13113 -13748 -14372 -14387 -13591 -15186	+1.1876 +1.2532 +1.3577 +1.3871 +1.38434 -1.5047 -1.5651 -1.6245	-11985 -1259 -11387 -1387 -1540 -1571 -1600	12008 123662 12365 13336 13336 13336 13536 13536 15773	-12.74 -12727 -13.768 -11.999 -14619 -15230 -15830 -16481	-1-2-1-09 -1-3-7-9-1 -1-3-1-0-0-1 -1-3-1-0-0-1 -1-3-1-0-0-1 -1-3-1-0-0-1 -1-3-1-0-0-1 -1-3-1-0 -1-3-1-0 -	から、 はいから から から から から から から から から から から から から か

U. S. GOVERNMENT CLING OFFIC: 1963 O - 666-00

TABLE X - Concluded

P, in. Hg	0.00	0.01	đ.o.2	Q,Ò 3	0.04	0.05	0.06	0.5
33.00 33.10 33.20 33.40 33.40 33.50 33.60 33.60 33.80 33.80	-2736 -2821 -2906 -2991 -3076 -3160 -3244 -3329 -3412 -3496	2829 2915 2999 3064 3169 3233 3337 3421	2753 -2838 -2923 -3093 -3177 -3177 -3345 -3429 -3513	- 2761 - 2932 - 3016 - 3101 - 3185 - 3270 - 3354 - 3438 - 3521	-2855 -2940 -3025 -3109 -3194 -3278 -3362 -3446 -3530	-2778 -2864 -2949 -3033 -3118 -3202 -3287 -3371 -3454 -3538	-2707 -2872 -3042 -3042 -3126 -3215 -3295 -3379 -3463 -3546	-276 -2000 -3149 -3219 -3367 -3471 -3565
34.00 34.10 34.20 34.30 34.40 34.50 34.50 34.60 34.60 34.90	-3580 -3663 -3746 -3829 -3912 -3994 -4076 -4159 -4240 -4322	3671 3754 3837 3930 4002 4002 4005 4167	-3596 -3690 -3763 -0845 -3928 -4923 -4175 -4257 -44339	-3605 -3688 -3771 -3854 -3936 -4019 -4103 -4265 -4347	-3613 -3696 -3779 -3862 -3945 -4027 -4191 -4273 -4355	-3621 -3704 -3787 -3870 -3953 -4035 -4118 -4200 -4281 -4363	-3630 -3713 -3796 -3879 -3961 -4044 -4126 -4208 -4271	-3638 -3721 -3604 -3604 -3605 -6055 -6055 -6055 -6055 -6055 -6055

P, in. Hs	0.0	3 1	0.2	0.3	.Ó:4	√. 0,5∈ ∞	0.6	
35.0 36.0 37.0 38.0 39.0 40.0 41.0 42.0 43.0	-4404 -5996 -5996 -6767 -7521 -8983 -9693 -10389	#289 #689 #687 #687 #39355 #39755 #39758 #11149	-1566 -5366 -6152 -6152 -7670 -8405 -9833 -10527	-54.77 -52.29 -52.29 -52.774 -62.774 -64.774 -19.73 -11.225	+4728 -5526 -65207 -7093 -7818 -85269 -9973 -1,0664 -1,1342	-4509 -5605 -6384 -7792 -78623 -79043 -100732 -11409	-48' -566 1 -722' -796' -86'6' -86'6' -10112 -10800 -114'76	4 11 11 11 11 11 11 11 11 11 11 11 11 11
45.0 46.0 47.0 48.0 49.0 56.0 51.0	-: 1743 -: 2402 -: 13049 -: 13685 -: 14310 -: 14926 -: 15531 -: 16127	-11809 -12467 -13113 -3748 -14272 -14967 -13591 -15186	-11876 -12532 -13177 -13817 -13434 -15047 -15651 -16245	- 1.1942 -3.2597 -1.105 -1.445 -1.5713 -1.5713 -1.5704	-12008 -12662 -13305 -13936 -13936 -14556 -15770 -16363	12.74 2.272 2.3968 2.3999 2.4617 2.5633 2.56421	-12/39 -12/39 -12/51 -14/68 -14/29 -15/90 -15/90	# 16 m

T'S GOVERNMENT VING OFFICE 1963 O - 600 500